

CECO STEEL PRODUCTS CORPORATION

A.I.A. File No. 16-A



**hollow
metal
doors**

CECO

1960





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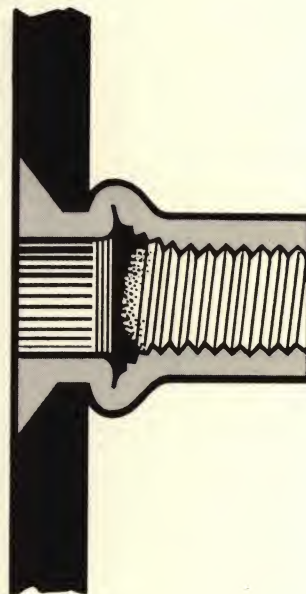
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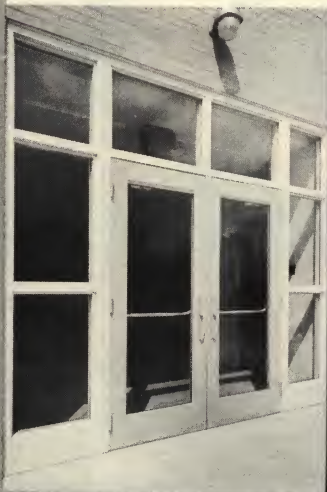
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RIVNUTS HOLD HARDWARE RIGID



Permanent holding power for surface-applied hardware is provided by the Rivnut, which has a tested load power of 930 lbs. This is equivalent to a No. 10 screw 1¼" long in kiln-dried oak. Each Rivnut has seven full threads, providing a holding power greater than the sectional area of the screw.



hollow metal doors

You benefit because you obtain your hollow-metal doors, frames and hardware from *one source*—Ceco—with all components engineered in a "package" for long trouble-free use. Then—by referring to this catalog—you can quickly select the door and hardware operations you need...no referring to separate hardware catalogs. You save time and trouble—you obtain quality engineered products. Here's why:

COMPLETE ENGINEERING—Ceco engineers the hardware and its attachment to doors and frames. This provides you with a *completely developed* "package"—doors and frames prepared for hardware—hardware prepared for doors and frames. *Cautionary note:* Be alert to so-called "packages" which require hardware preparation on the job. With Ceco you have no such problems, because everything fits...no drilling, no tapping, no expediting problems. Ceco's "total design" program assures you the highest standards of door performances.

EASY HARDWARE SELECTION—You become your own hardware expert when you use this Ceco catalog, because Ceco hardware is clearly described and numbered for easy selection. You simply select the hardware and door operations to suit your requirements.

QUALITY PRODUCTS—A full range of doors and frames and hollow-metal work, such as side-lights and borrowed-lights, is manufactured under rigid control. Quality is maintained by technical and mechanical know-how developed through years of experience. Die cut mortises for flush hardware assure accuracy. Reinforced tapped holes for surface hardware provide rugged holding power. This is custom quality in factory-made doors.

HIDDEN COSTS ELIMINATED—Because Ceco prepares all doors and frames for all hardware items in the catalog, *the hidden costs of door and frame preparation are eliminated*. You are not faced with modifying hardware or its application in the field. Doors and hardware are quickly erected with hand tools. All in all, the Ceco door "package" spells higher value for you.









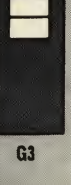

UNDIVIDED RESPONSIBILITY—Ceco accepts responsibility for doors, frames, hardware, and hardware attachment. With Ceco doors you eliminate the problems posed by non-engineered door and hardware assembly. With the Ceco "package" the doors must be right for the hardware, and the hardware right for the doors...no separate suppliers...no hardware templates...no mismatched holes. You save time, you get the functions you want and the high quality you deserve...and your clients benefit throughout the years when you specify from this catalog.



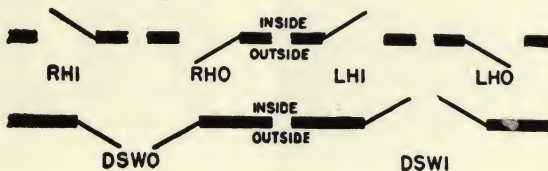


Hollow Metal Medallion Doors • types and sizes

All doors except MV design carried in Chicago or Company warehouses.
Standard 5½" depth frames are carried in stock in company warehouses.

SINGLE SWING DOORS						DOUBLE SWING DOORS					
DESIGN	NUMBER	DOOR OPENING		GLASS SIZE		DESIGN	NUMBER	DOOR OPENING		GLASS SIZE	
		WIDTH	HEIGHT	WIDTH	HEIGHT			WIDTH	HEIGHT	WIDTH	HEIGHT
 M	M-2068M	2'-0"	6'-8"	NO GLAZING		 M	M-4068M	4'-0"	6'-8"	NO GLAZING	
	M-2668M	2'-6"	6'-8"				M-5068M	5'-0"	6'-8"		
	M-2868M	2'-8"	6'-8"				M-5468M	5'-4"	6'-8"		
	M-3068M	3'-0"	6'-8"				M-6068M	6'-0"	6'-8"		
	M-3468M	3'-4"	6'-8"				M-6868M	6'-8"	6'-8"		
	M-2070M	2'-0"	7'-0"				M-4070M	4'-0"	7'-0"		
	M-2670M	2'-6"	7'-0"				M-5070M	5'-0"	7'-0"		
	M-2870M	2'-8"	7'-0"				M-5470M	5'-4"	7'-0"		
	M-3070M	3'-0"	7'-0"				M-6070M	6'-0"	7'-0"		
	M-3470M	3'-4"	7'-0"				M-6870M	6'-8"	7'-0"		
 MV	M-2068MV	2'-0"	6'-8"	10½"	10½"	 MV	M-4068MV	4'-0"	6'-8"	10½"	10½"
	M-2668MV	2'-6"	6'-8"				M-5068MV	5'-0"	6'-8"		
	M-2868MV	2'-8"	6'-8"				M-5468MV	5'-4"	6'-8"		
	M-3068MV	3'-0"	6'-8"				M-6068MV	6'-0"	6'-8"		
	M-3468MV	3'-4"	6'-8"				M-6868MV	6'-8"	6'-8"		
	M-2070MV	2'-0"	7'-0"				M-4070MV	4'-0"	7'-0"		
	M-2670MV	2'-6"	7'-0"				M-5070MV	5'-0"	7'-0"		
	M-2870MV	2'-8"	7'-0"				M-5470MV	5'-4"	7'-0"		
	M-3070MV	3'-0"	7'-0"				M-6070MV	6'-0"	7'-0"		
	M-3470MV	3'-4"	7'-0"				M-6870MV	6'-8"	7'-0"		
 G	M-2068G	2'-0"	6'-8"	12¾"	27¼"	 G	M-4068G	4'-0"	6'-8"	12¾"	27¼"
	M-2668G	2'-6"	6'-8"	18¾"	27¼"		M-5068G	5'-0"	6'-8"	18¾"	27¼"
	M-2868G	2'-8"	6'-8"	20¾"	27¼"		M-5468G	5'-4"	6'-8"	20¾"	27¼"
	M-3068G	3'-0"	6'-8"	24¾"	27¼"		M-6068G	6'-0"	6'-8"	24¾"	27¼"
	M-3468G	3'-4"	6'-8"	28¾"	27¼"		M-6868G	6'-8"	6'-8"	28¾"	27¼"
	M-2070G	2'-0"	7'-0"	12¾"	31¼"		M-4070G	4'-0"	7'-0"	12¾"	31¼"
	M-2670G	2'-6"	7'-0"	18¾"	31¼"		M-5070G	5'-0"	7'-0"	18¾"	31¼"
	M-2870G	2'-8"	7'-0"	20¾"	31¼"		M-5470G	5'-4"	7'-0"	20¾"	31¼"
	M-3070G	3'-0"	7'-0"	24¾"	31¼"		M-6070G	6'-0"	7'-0"	24¾"	31¼"
	M-3470G	3'-4"	7'-0"	28¾"	31¼"		M-6870G	6'-8"	7'-0"	28¾"	31¼"
 G2	M-2068G2	2'-0"	6'-8"	12¾"	13⅞"	 G2	M-4068G2	4'-0"	6'-8"	12¾"	13⅞"
	M-2668G2	2'-6"	6'-8"	18¾"	13⅞"		M-5068G2	5'-0"	6'-8"	18¾"	13⅞"
	M-2868G2	2'-8"	6'-8"	20¾"	13⅞"		M-5468G2	5'-4"	6'-8"	20¾"	13⅞"
	M-3068G2	3'-0"	6'-8"	24¾"	13⅞"		M-6068G2	6'-0"	6'-8"	24¾"	13⅞"
	M-3468G2	3'-4"	6'-8"	28¾"	13⅞"		M-6868G2	6'-8"	6'-8"	28¾"	13⅞"
	M-2070G2	2'-0"	7'-0"	12¾"	15⅞"		M-4070G2	4'-0"	7'-0"	12¾"	15⅞"
	M-2670G2	2'-6"	7'-0"	18¾"	15⅞"		M-5070G2	5'-0"	7'-0"	18¾"	15⅞"
	M-2870G2	2'-8"	7'-0"	20¾"	15⅞"		M-5470G2	5'-4"	7'-0"	20¾"	15⅞"
	M-3070G2	3'-0"	7'-0"	24¾"	15⅞"		M-6070G2	6'-0"	7'-0"	24¾"	15⅞"
	M-3470G2	3'-4"	7'-0"	28¾"	15⅞"		M-6870G2	6'-8"	7'-0"	28¾"	15⅞"
 G3	M-2068G3	2'-0"	6'-8"	12¾"	8⅝"	 G3	M-4068G3	4'-0"	6'-8"	12¾"	8⅝"
	M-2668G3	2'-6"	6'-8"	18¾"	8⅝"		M-5068G3	5'-0"	6'-8"	18¾"	8⅝"
	M-2868G3	2'-8"	6'-8"	20¾"	8⅝"		M-5468G3	5'-4"	6'-8"	20¾"	8⅝"
	M-3068G3	3'-0"	6'-8"	24¾"	8⅝"		M-6068G3	6'-0"	6'-8"	24¾"	8⅝"
	M-3468G3	3'-4"	6'-8"	28¾"	8⅝"		M-6868G3	6'-8"	6'-8"	28¾"	8⅝"
	M-2070G3	2'-0"	7'-0"	12¾"	10"		M-4070G3	4'-0"	7'-0"	12¾"	10"
	M-2670G3	2'-6"	7'-0"	18¾"	10"		M-5070G3	5'-0"	7'-0"	18¾"	10"
	M-2870G3	2'-8"	7'-0"	20¾"	10"		M-5470G3	5'-4"	7'-0"	20¾"	10"
	M-3070G3	3'-0"	7'-0"	24¾"	10"		M-6070G3	6'-0"	7'-0"	24¾"	10"
	M-3470G3	3'-4"	7'-0"	28¾"	10"		M-6870G3	6'-8"	7'-0"	28¾"	10"

HAND AND SWING DIAGRAMS



ORDERING INFORMATION

When ordering doors and frames always give complete information, including type, size, style and hand and swing. For example: M-3070-G-RHO or M-6070-G-DSWI-BA.

When ordering double doors indicate swing of door leaves and hand of active leaf. For example:

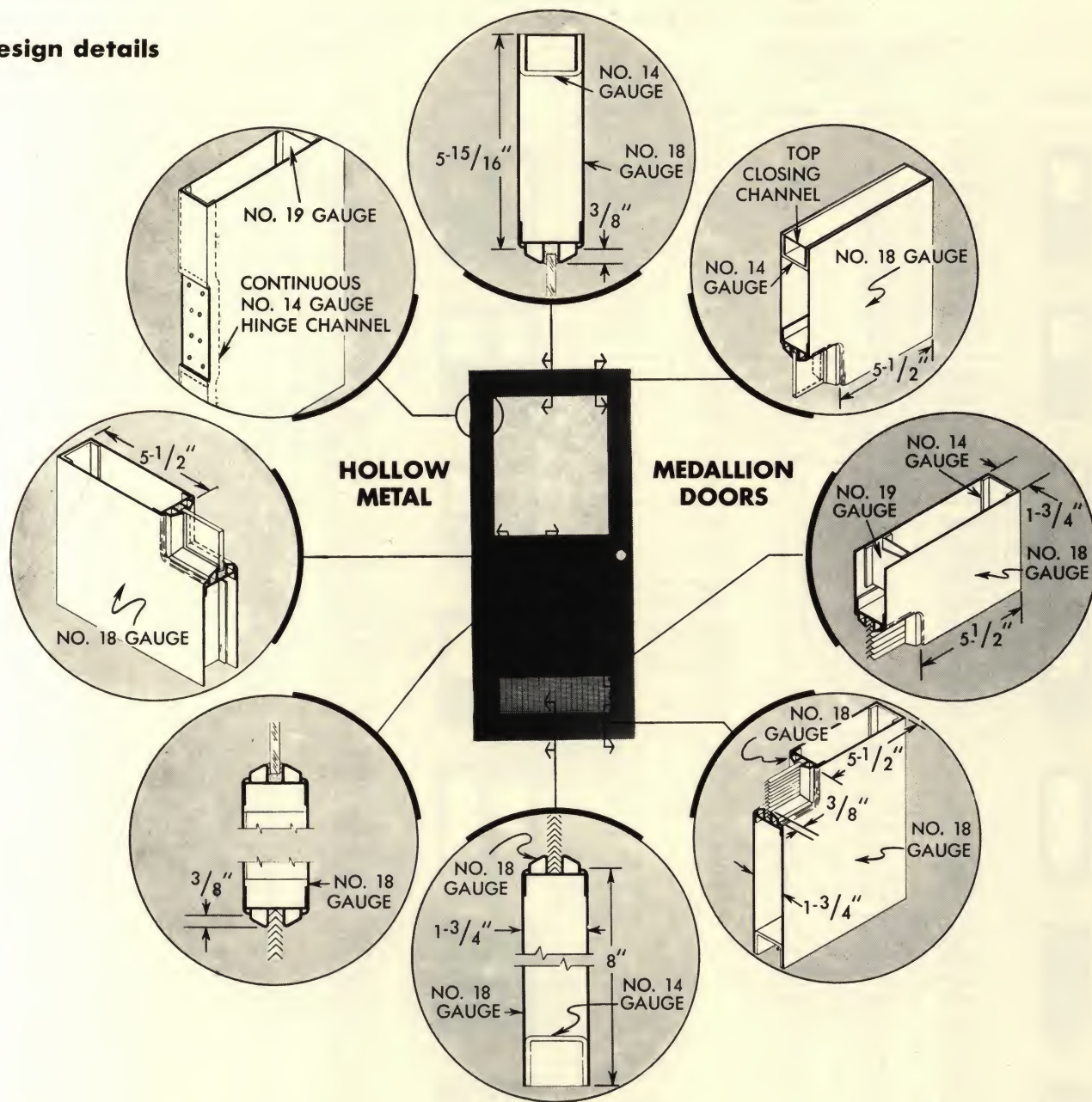
DSWI-RA—Double swing in right hand leaf active.

DSWO-LA—Double swing out left hand leaf active.

DSWO-BA—Double swing out both leaves active.

When both leaves are active, indicate if no astragal or split astragal is required. Split astragal used only on doors with both leaves active.

See Page 27-d for astragals.

design details


Hollow Metal Medallion Doors are fabricated from No. 18 gauge furniture-quality cold-rolled stretcher leveled steel sheets, $1\frac{3}{4}"$ thick. Vertical No. 19 gauge steel stiffeners are spaced approximately 6" apart, spot welded to one face sheet and projection welded to the opposite sheet. Top and bottom channels are No. 14 gauge steel, spot welded to face sheets not less than 3" on centers. Vertical edges of the door are reinforced with No. 14 gauge steel channels the entire height of the door. Doors are insulated with spun mineral wool.

Ceco doors and frames are die cut and reinforced for Cylindrical type locksets or for Mortise type locksets. Bottom of doors have weep holes to eliminate interior condensation.

Lock stiles are formed to allow $\frac{1}{8}"$ operating clearance.

Hinges are mortised and reinforced. Glazing beads are recessed behind the formed opening in the face sheet, beveled and attached without screws.

















Doors are bonderized and painted with one coat of rust inhibitive zinc chromate primer, grey in color, oven dried. All doors are shipped in individual protective cartons. Each carton is marked for door size, hand and swing, and location or mark number.

Refer to pages No. 10 and 11 for Underwriters' Labelled doors, frames and hardware.

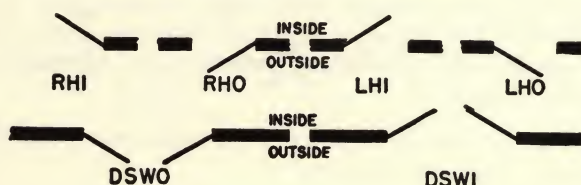


Hollow Metal Flush Panel Doors • types and sizes

All doors except LG, FG, and SG carried in Chicago or Company warehouses.
Standard 5½" depth frames are carried in stock in company warehouses.

SINGLE SWING DOORS						DOUBLE SWING DOORS						
DESIGN	TYPE	DOOR OPENING		GLASS SIZE		DESIGN	TYPE	DOOR OPENING		GLASS SIZE		
		WIDTH	HEIGHT	WIDTH	HEIGHT			WIDTH	HEIGHT	WIDTH	HEIGHT	
	F-2668G	2'-6"	6'-8"	19½"	29½"		F-5068G	5'-0"	6'-8"	19½"	29½"	
	F-2868G	2'-8"	6'-8"	21½"	29½"		F-5468G	5'-4"	6'-8"	21½"	29½"	
	F-3068G	3'-0"	6'-8"	25½"	29½"		F-6068G	6'-0"	6'-8"	25½"	29½"	
	F-3468G	3'-4"	6'-8"	29½"	29½"		F-6868G	6'-8"	6'-8"	29½"	29½"	
	F-2670G	2'-6"	7'-0"	19½"	33½"		F-5070G	5'-0"	7'-0"	19½"	33½"	
	F-2870G	2'-8"	7'-0"	21½"	33½"		F-5470G	5'-4"	7'-0"	21½"	33½"	
	F-3070G	3'-0"	7'-0"	25½"	33½"		F-6070G	6'-0"	7'-0"	25½"	33½"	
	F-3470G	3'-4"	7'-0"	29½"	33½"		F-6870G	6'-8"	7'-0"	29½"	33½"	
	F-3870G	3'-8"	7'-0"	33½"	33½"		F-7470G	7'-4"	7'-0"	33½"	33½"	
	F-4070G	4'-0"	7'-0"	37½"	33½"		F-8070G	8'-0"	7'-0"	37½"	33½"	
	F-2668G2	2'-6"	6'-8"	19½"	14½"		F-5068G2	5'-0"	6'-8"	19½"	14½"	
	F-2868G2	2'-8"	6'-8"	21½"	14½"		F-5468G2	5'-4"	6'-8"	21½"	14½"	
	F-3068G2	3'-0"	6'-8"	25½"	14½"		F-6068G2	6'-0"	6'-8"	25½"	14½"	
	F-2670G2	2'-6"	7'-0"	19½"	16½"		F-5070G2	5'-0"	7'-0"	19½"	16½"	
	F-2870G2	2'-8"	7'-0"	21½"	16½"		F-5470G2	5'-4"	7'-0"	21½"	16½"	
	F-3070G2	3'-0"	7'-0"	25½"	16½"		F-6070G2	6'-0"	7'-0"	25½"	16½"	
	F-2668G4	2'-6"	6'-8"	9¾"	14½"		F-5068G4	5'-0"	6'-8"	9¾"	14½"	
	F-2868G4	2'-8"	6'-8"	10¾"	14½"		F-5468G4	5'-4"	6'-8"	10¾"	14½"	
	F-3068G4	3'-0"	6'-8"	12¾"	14½"		F-6068G4	6'-0"	6'-8"	12¾"	14½"	
	F-3468G4	3'-4"	6'-8"	14¾"	14½"		F-6868G4	6'-8"	6'-8"	14¾"	14½"	
	F-2670G4	2'-6"	7'-0"	9¾"	16½"		F-5070G4	5'-0"	7'-0"	9¾"	16½"	
	F-2870G4	2'-8"	7'-0"	10¾"	16½"		F-5470G4	5'-4"	7'-0"	10¾"	16½"	
	F-3070G4	3'-0"	7'-0"	12¾"	16½"		F-6070G4	6'-0"	7'-0"	12¾"	16½"	
	F-3470G4	3'-4"	7'-0"	14¾"	16½"		F-6870G4	6'-8"	7'-0"	14¾"	16½"	
	F-3870G4	3'-8"	7'-0"	16¾"	16½"		F-7470G4	7'-4"	7'-0"	16¾"	16½"	
	F-4070G4	4'-0"	7'-0"	18¾"	16½"		F-8070G4	8'-0"	7'-0"	18¾"	16½"	
	F-3070LG	3'-0"	7'-0"	25½"	52¾"			F-6070LG	6'-0"	7'-0"	25½"	52¾"
	F-3470LG	3'-4"	7'-0"	29½"	52¾"			F-6870LG	6'-8"	7'-0"	29½"	52¾"
	F-3870LG	3'-8"	7'-0"	33½"	52¾"			F-7470LG	7'-4"	7'-0"	33½"	52¾"
		F-2868FG	2'-8"	6'-8"	21½"		64¾"		F-5468FG	5'-4"	6'-8"	21½"
F-3070FG		3'-0"	7'-0"	25½"	68¾"	F-6070FG	6'-0"		7'-0"	25½"	68¾"	
F-3470FG		3'-4"	7'-0"	29½"	68¾"	F-6870FG	6'-8"		7'-0"	29½"	68¾"	
F-3870FG		3'-8"	7'-0"	33½"	68¾"	F-7470FG	7'-4"		7'-0"	33½"	68¾"	
	F-2068M	2'-0"	6'-8"	FULL METAL PANEL			F-4068M	4'-0"	6'-8"	FULL METAL PANEL		
	F-2668M	2'-6"	6'-8"				F-5068M	5'-0"	6'-8"			
	F-2868M	2'-8"	6'-8"				F-5468M	5'-4"	6'-8"			
	F-3068M	3'-0"	6'-8"				F-6068M	6'-0"	6'-8"			
	F-3468M	3'-4"	6'-8"				F-6868M	6'-8"	6'-8"			
	F-2070M	2'-0"	7'-0"				F-4070M	4'-0"	7'-0"			
	F-2670M	2'-6"	7'-0"				F-5070M	5'-0"	7'-0"			
	F-2870M	2'-8"	7'-0"				F-5470M	5'-4"	7'-0"			
	F-3070M	3'-0"	7'-0"				F-6070M	6'-0"	7'-0"			
	F-3470M	3'-4"	7'-0"				F-6870M	6'-8"	7'-0"			
	F-3870M	3'-8"	7'-0"		F-7470M	7'-4"	7'-0"		F-8070M	8'-0"	7'-0"	
	F-4070M	4'-0"	7'-0"		F-5468SG	5'-4"	6'-8"		6½"	64¾"		
	F-2868SG	2'-8"	6'-8"		F-6070SG	6'-0"	7'-0"		6½"	68¾"		
	F-3070SG	3'-0"	7'-0"		F-6870SG	6'-8"	7'-0"		6½"	68¾"		
	F-3470SG	3'-4"	7'-0"		F-7470SG	7'-4"	7'-0"		6½"	68¾"		
F-3870SG	3'-8"	7'-0"										

HAND AND SWING DIAGRAMS



When ordering doors and frames always give complete information, including type, size, style and hand and swing. For example: F-3070-G2-RHO or F-6070-LG-DSWI-BA.

When ordering double doors indicate swing of door leaves and hand of active leaf. For example:

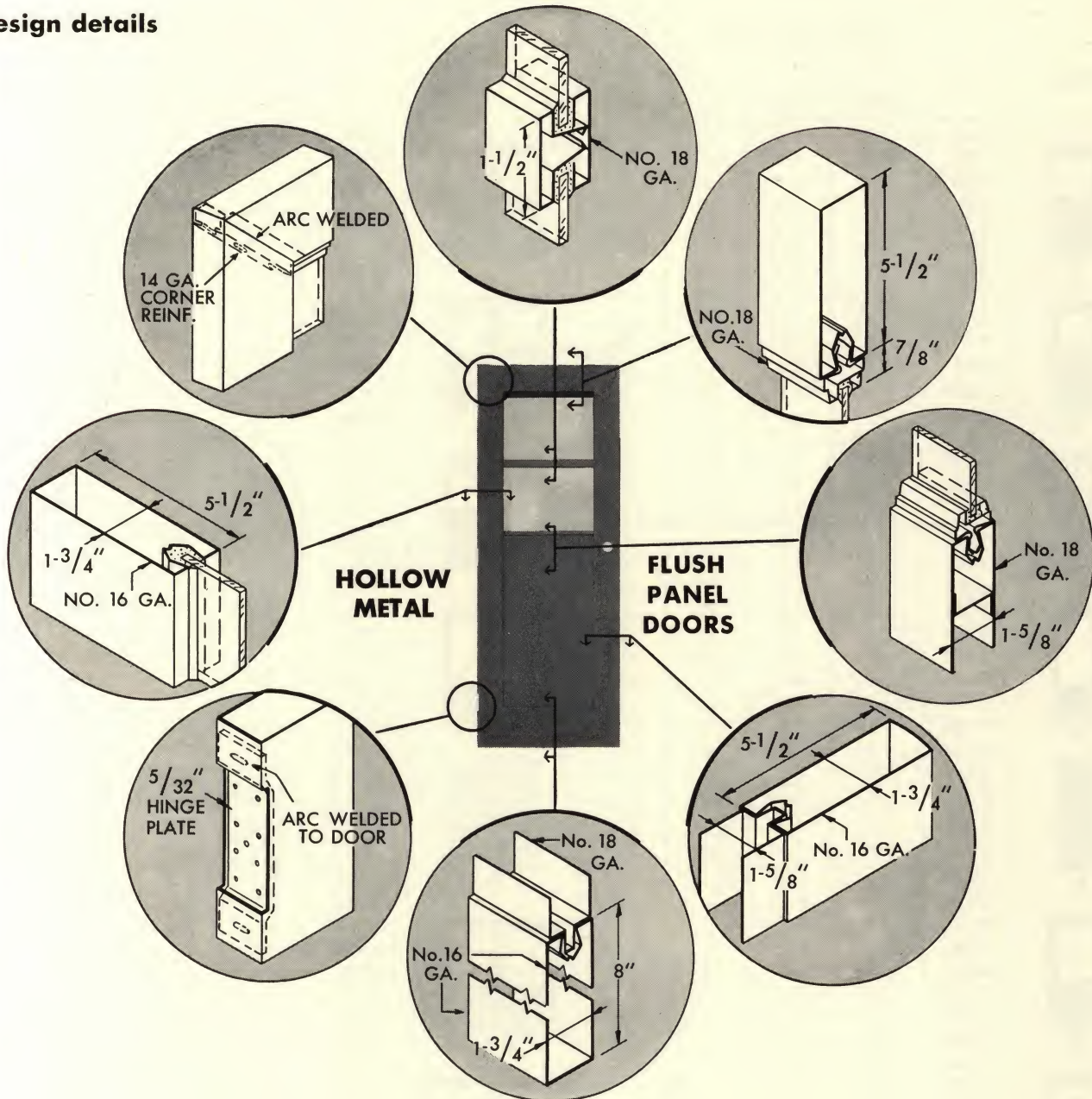
DSWI-RA—Double swing in right hand leaf active.

DSWO-LA—Double swing out left hand leaf active.

DSWO-BA—Double swing out both leaves active.

When both leaves are active, indicate if no astragal or split astragal is required. Split astragal used only on doors with both leaves active.

See page 27-d for astragals.

design details


Hollow Metal Flush Panel Doors are fabricated from No. 16 gauge steel sheets. Stiles, and top rails are $5\frac{1}{2}'' \times 1\frac{3}{4}''$. Bottom rails are $8'' \times 1\frac{3}{4}''$. Metal panels are No. 18 gauge steel sheet and have Z stiffeners. Interiors of metal panels are undercoated with sound deadening material.

Lock stiles are formed to allow $\frac{1}{8}''$ operating clearance.

Ceco Doors and Frames are die cut and reinforced for Cylindrical-type locksets or for Ceco Mortise-type locksets; no fillers or universal type strikes are used.

Bottom rails have weep holes for elimination of interior condensation.

Corners are mitred, reinforced, face welded, ground smooth.

Hinges are mortised and reinforced.

Moldings, glazing beads, muntins and glazing stops are No. 18 gauge roll formed steel.

Glazing beads and muntin glazing stops are always on the inside of the door and are held in place with Phillips-head screws.

Doors are bonderized and painted with one coat of zinc chromate rust-resisting primer, neutral grey in color.

Refer to pages No. 10 and 11 for Underwriters' Labelled doors, frames and hardware.

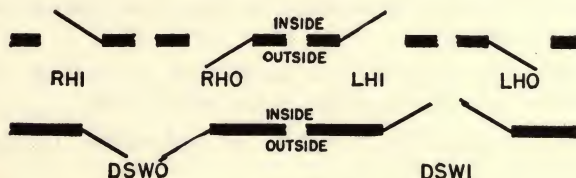


Hollow Metal Panel Doors • types and sizes

Doors shown on this page carried in stock in company or Chicago warehouses.
Standard 5½" depth frames are carried in stock in company warehouses.

SINGLE SWING DOORS						DOUBLE SWING DOORS					
DESIGN	TYPE	DOOR OPENING		GLASS SIZE		DESIGN	TYPE	DOOR OPENING		GLASS SIZE	
		WIDTH	HEIGHT	WIDTH	HEIGHT			WIDTH	HEIGHT	WIDTH	HEIGHT
	P-2668G	2'-6"	6'-8"	19½"	29½"		P-5068G	5'-0"	6'-8"	19½"	29½"
	P-2868G	2'-8"	6'-8"	21½"	29½"		P-5468G	5'-4"	6'-8"	21½"	29½"
	P-3068G	3'-0"	6'-8"	25½"	29½"		P-6068G	6'-0"	6'-8"	25½"	29½"
	P-3468G	3'-4"	6'-8"	29½"	29½"		P-6868G	6'-8"	6'-8"	29½"	29½"
	P-2670G	2'-6"	7'-0"	19½"	33½"		P-5070G	5'-0"	7'-0"	19½"	33½"
	P-2870G	2'-8"	7'-0"	21½"	33½"		P-5470G	5'-4"	7'-0"	21½"	33½"
	P-3070G	3'-0"	7'-0"	25½"	33½"		P-6070G	6'-0"	7'-0"	25½"	33½"
	P-3470G	3'-4"	7'-0"	29½"	33½"		P-6870G	6'-8"	7'-0"	29½"	33½"
	P-3870G	3'-8"	7'-0"	33½"	33½"		P-7470G	7'-4"	7'-0"	33½"	33½"
	P-4070G	4'-0"	7'-0"	37½"	33½"		P-8070G	8'-0"	7'-0"	37½"	33½"
P-4080G	4'-0"	8'-0"	37½"	45½"	P-8080G	8'-0"	8'-0"	37½"	45½"		
	P-2668G2	2'-6"	6'-8"	19½"	14½"		P-5068G2	5'-0"	6'-8"	19½"	14½"
	P-2868G2	2'-8"	6'-8"	21½"	14½"		P-5468G2	5'-4"	6'-8"	21½"	14½"
	P-3068G2	3'-0"	6'-8"	25½"	14½"		P-6068G2	6'-0"	6'-8"	25½"	14½"
	P-2670G2	2'-6"	7'-0"	19½"	16½"		P-5070G2	5'-0"	7'-0"	19½"	16½"
	P-2870G2	2'-8"	7'-0"	21½"	16½"		P-5470G2	5'-4"	7'-0"	21½"	16½"
P-3070G2	3'-0"	7'-0"	25½"	16½"	P-6070G2	6'-0"	7'-0"	25½"	16½"		
	P-2668G4	2'-6"	6'-8"	9¾"	14½"		P-5068G4	5'-0"	6'-8"	9¾"	14½"
	P-2868G4	2'-8"	6'-8"	10¾"	14½"		P-5468G4	5'-4"	6'-8"	10¾"	14½"
	P-3068G4	3'-0"	6'-8"	12¾"	14½"		P-6068G4	6'-0"	6'-8"	12¾"	14½"
	P-3468G4	3'-4"	6'-8"	14¾"	14½"		P-6868G4	6'-8"	6'-8"	14¾"	14½"
	P-2670G4	2'-6"	7'-0"	9¾"	16½"		P-5070G4	5'-0"	7'-0"	9¾"	16½"
	P-2870G4	2'-8"	7'-0"	10¾"	16½"		P-5470G4	5'-4"	7'-0"	10¾"	16½"
	P-3070G4	3'-0"	7'-0"	12¾"	16½"		P-6070G4	6'-0"	7'-0"	12¾"	16½"
	P-3470G4	3'-4"	7'-0"	14¾"	16½"		P-6870G4	6'-8"	7'-0"	14¾"	16½"
	P-3870G4	3'-8"	7'-0"	16¾"	16½"		P-7470G4	7'-4"	7'-0"	16¾"	16½"
	P-4070G4	4'-0"	7'-0"	18¾"	16½"		P-8070G4	8'-0"	7'-0"	18¾"	16½"
	P-3068LG	3'-0"	6'-8"	25½"	48¾"		P-6068LG	6'-0"	6'-8"	25½"	48¾"
	P-3468LG	3'-4"	6'-8"	29½"	48¾"		P-6868LG	6'-8"	6'-8"	29½"	48¾"
	P-3070LG	3'-0"	7'-0"	25½"	52¾"		P-6070LG	6'-0"	7'-0"	25½"	52¾"
	P-3470LG	3'-4"	7'-0"	29½"	52¾"		P-6870LG	6'-8"	7'-0"	29½"	52¾"
	P-2068M2	2'-0"	6'-8"	TWO METAL PANELS			P-4068M2	4'-0"	6'-8"	TWO METAL PANELS	
	P-2668M2	2'-6"	6'-8"				P-5068M2	5'-0"	6'-8"		
	P-2868M2	2'-8"	6'-8"				P-5468M2	5'-4"	6'-8"		
	P-3068M2	3'-0"	6'-8"				P-6068M2	6'-0"	6'-8"		
	P-3468M2	3'-4"	6'-8"				P-6868M2	6'-8"	6'-8"		
	P-2070M2	2'-0"	7'-0"				P-4070M2	4'-0"	7'-0"		
	P-2670M2	2'-6"	7'-0"				P-5070M2	5'-0"	7'-0"		
	P-2870M2	2'-8"	7'-0"				P-5470M2	5'-4"	7'-0"		
	P-3070M2	3'-0"	7'-0"				P-6070M2	6'-0"	7'-0"		
	P-3470M2	3'-4"	7'-0"				P-6870M2	6'-8"	7'-0"		
	P-3870M2	3'-8"	7'-0"				P-7470M2	7'-4"	7'-0"		
	P-4070M2	4'-0"	7'-0"				P-8070M2	8'-0"	7'-0"		
	P-4080M2	4'-0"	8'-0"				P-8080M2	8'-0"	8'-0"		
P-50100M3	5'-0"	10'-0"	THREE PANEL		P-100100M3	10'-0"	10'-0"	THREE PANEL			
	P-4080G6	4'-0"	8'-0"	18¼"	14¾"		P-8080G6	8'-0"	8'-0"	18¼"	14¾"
	P-50100G12	5'-0"	10'-0"	16"	14½"		P-100100G12	10'-0"	10'-0"	16"	14½"

HAND AND SWING DIAGRAMS



When ordering doors and frames always give complete information including type, size, style and hand and swing. For example: P-3070-G2-RHO or P-6070-LG-DSWI-BA.

When ordering doors and frames always give complete information, hand of active leaf. For example:

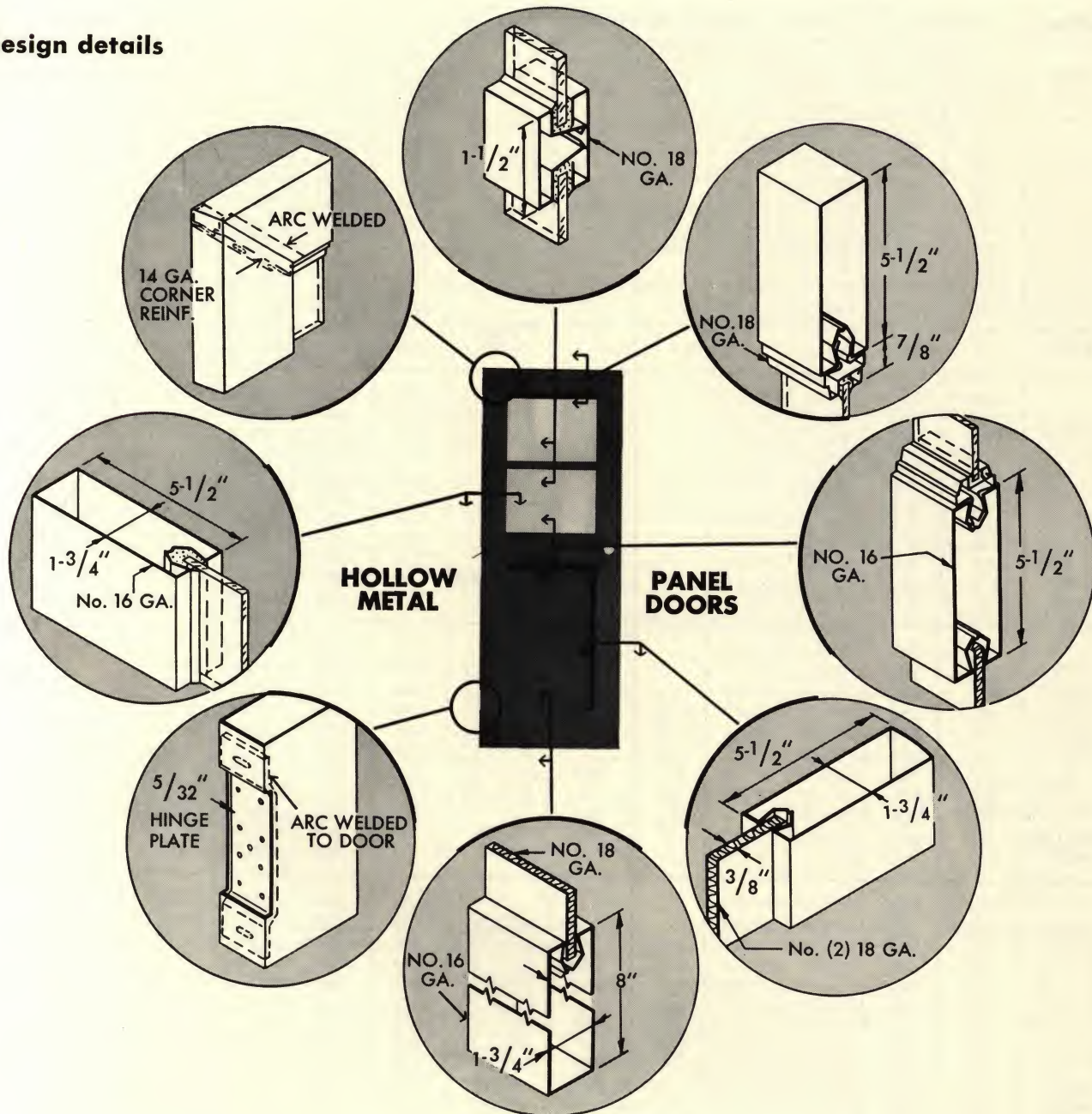
DSWI-RA—Double swing in right hand leaf active.

DSWO-LA—Double swing out left hand leaf active.

DSWO-BA—Double swing out both leaves active.

When both leaves are active, indicate if no astragal or split astragal is required.

See page 27-d for astragals.

design details


Hollow Metal Panel Doors are fabricated from No. 16 gauge steel sheets. Stiles, top rails and center rails are $5\frac{1}{2}'' \times 1\frac{3}{4}''$. Bottom rails are $8'' \times 1\frac{3}{4}''$.

Metal panels are two No. 18 gauge steel sheets with insulating filler between sheets. Thickness of panel $\frac{3}{8}''$.

Lock stiles are formed to allow $\frac{1}{8}''$ operating clearance.

Ceco Doors and Frames are die cut and reinforced for Cylindrical-type locksets or for Ceco Mortise-type locksets; no universal type strikes are used.

Corners are mitred, reinforced, face welded and ground smooth. Center rails are face welded to stiles, ground smooth.

Hinges are mortised and reinforced.

Moldings, glazing beads, muntins and glazing stops are No. 18 gauge roll formed steel.

Glazing beads and muntin stops are always on the inside of the door and are held in place with Phillips-head screws.


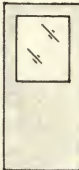



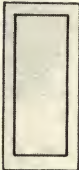
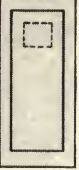
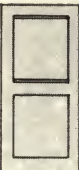
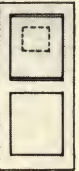
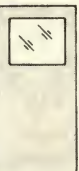
Doors are bonderized and painted with one coat of zinc chromate rust-resisting primer, neutral grey in color.

Refer to pages No. 10 and 11 for Underwriters' Labelled doors, frames and hardware.



Underwriters' Labelled Doors and Frames

3-Hour, 1½ Hour, ¾ Hour — A - B - C - D and E

DOOR DESIGN	DOOR SIZES		DOOR OPENING		GLASS AREA	U.L. RATING	DOOR DESIGN	DOOR SIZES		DOOR OPENING		GLASS AREA	U.L. RATING
	SINGLE SWING	DOUBLE SWING	SINGLE	DOUBLE				SINGLE SWING	DOUBLE SWING	SINGLE	DOUBLE		
 MEDALLION DOOR	2068	4068	2'0"x6'8"	4'0"x6'8"	No Glass	3-Hour "A" Label 250° or 650° Rated	 MEDALLION DOOR	2068	4068	2'0"x6'8"	4'0"x6'8"	1296 Sq. Inches Max. Each Glass Opng.	¾-Hour "C" Label Not Rated
	2668	5068	2'6"x6'8"	5'0"x6'8"				2668	5068	2'6"x6'8"	5'0"x6'8"		
	2868	5468	2'8"x6'8"	5'4"x6'8"				2868	5468	2'8"x6'8"	5'4"x6'8"		
	3068	6068	3'0"x6'8"	6'0"x6'8"				3068	6068	3'0"x6'8"	6'0"x6'8"		
	3468	6868	3'4"x6'8"	6'8"x6'8"				3468	6868	3'4"x6'8"	6'8"x6'8"		
	2070	4070	2'0"x7'0"	4'0"x7'0"				2070	4070	2'0"x7'0"	4'0"x7'0"		
	2670	5070	2'6"x7'0"	5'0"x7'0"				2670	5070	2'6"x7'0"	5'0"x7'0"		
	2870	5470	2'8"x7'0"	5'4"x7'0"				2870	5470	2'8"x7'0"	5'4"x7'0"		
	3070	6070	3'0"x7'0"	6'0"x7'0"				3070	6070	3'0"x7'0"	6'0"x7'0"		
	3470	6870	3'4"x7'0"	6'8"x7'0"				3470	6870	3'4"x7'0"	6'8"x7'0"		
	3870	7470	3'8"x7'0"	7'4"x7'0"				3870	7470	3'8"x7'0"	7'4"x7'0"		
 FLUSH PANEL	2068	4068	2'0"x6'8"	4'0"x6'8"	No Glass	3-Hour "A" Label 250° or 650° Rated	 MEDALLION DOOR	2068	4068	2'0"x6'8"	4'0"x6'8"	No Glass	1½-Hour "D" Label 250° or 650° Rated
	2668	5068	2'6"x6'8"	5'0"x6'8"				2668	5068	2'6"x6'8"	5'0"x6'8"		
	2868	5468	2'8"x6'8"	5'4"x6'8"				2868	5468	2'8"x6'8"	5'4"x6'8"		
	3068	6068	3'0"x6'8"	6'0"x6'8"				3068	6068	3'0"x6'8"	6'0"x6'8"		
	3468	6868	3'4"x6'8"	6'8"x6'8"				3468	6868	3'4"x6'8"	6'8"x6'8"		
	2070	4070	2'0"x7'0"	4'0"x7'0"				2070	4070	2'0"x7'0"	4'0"x7'0"		
	2670	5070	2'6"x7'0"	5'0"x7'0"				2670	5070	2'6"x7'0"	5'0"x7'0"		
	2870	5470	2'8"x7'0"	5'4"x7'0"				2870	5470	2'8"x7'0"	5'4"x7'0"		
	3070	6070	3'0"x7'0"	6'0"x7'0"				3070	6070	3'0"x7'0"	6'0"x7'0"		
	3470	6870	3'4"x7'0"	6'8"x7'0"				3470	6870	3'4"x7'0"	6'8"x7'0"		
	3870	7470	3'8"x7'0"	7'4"x7'0"				3870	7470	3'8"x7'0"	7'4"x7'0"		
 MEDALLION DOOR	2068	4068	2'0"x6'8"	4'0"x6'8"	100 Sq. Inches Max. Each Wall Opng.	1½-Hour "B" Label 250° or 650° Rated	 FLUSH PANEL	2068	4068	2'0"x6'8"	4'0"x6'8"	No Glass	1½-Hour "D" Label 250° or 650° Rated
	2668	5068	2'6"x6'8"	5'0"x6'8"				2668	5068	2'6"x6'8"	5'0"x6'8"		
	2868	5468	2'8"x6'8"	5'4"x6'8"				2868	5468	2'8"x6'8"	5'4"x6'8"		
	3068	6068	3'0"x6'8"	6'0"x6'8"				3068	6068	3'0"x6'8"	6'0"x6'8"		
	3468	6868	3'4"x6'8"	6'8"x6'8"				3468	6868	3'4"x6'8"	6'8"x6'8"		
	2070	4070	2'0"x7'0"	4'0"x7'0"				2070	4070	2'0"x7'0"	4'0"x7'0"		
	2670	5070	2'6"x7'0"	5'0"x7'0"				2670	5070	2'6"x7'0"	5'0"x7'0"		
	2870	5470	2'8"x7'0"	5'4"x7'0"				2870	5470	2'8"x7'0"	5'4"x7'0"		
	3070	6070	3'0"x7'0"	6'0"x7'0"				3070	6070	3'0"x7'0"	6'0"x7'0"		
	3470	6870	3'4"x7'0"	6'8"x7'0"				3470	6870	3'4"x7'0"	6'8"x7'0"		
	3870	7470	3'8"x7'0"	7'4"x7'0"				3870	7470	3'8"x7'0"	7'4"x7'0"		
 FLUSH PANEL	2068	4068	2'0"x6'8"	4'0"x6'8"	100 Sq. Inches Max. Each Wall Opng.	1½-Hour "B" Label 250° or 650° Rated	 PANEL DOOR	2068	4068	2'0"x6'8"	4'0"x6'8"	No Glass	1½-Hour "D" Label Not Rated
	2668	5068	2'6"x6'8"	5'0"x6'8"				2668	5068	2'6"x6'8"	5'0"x6'8"		
	2868	5468	2'8"x6'8"	5'4"x6'8"				2868	5468	2'8"x6'8"	5'4"x6'8"		
	3068	6068	3'0"x6'8"	6'0"x6'8"				3068	6068	3'0"x6'8"	6'0"x6'8"		
	3468	6868	3'4"x6'8"	6'8"x6'8"				3468	6868	3'4"x6'8"	6'8"x6'8"		
	2070	4070	2'0"x7'0"	4'0"x7'0"				2070	4070	2'0"x7'0"	4'0"x7'0"		
	2670	5070	2'6"x7'0"	5'0"x7'0"				2670	5070	2'6"x7'0"	5'0"x7'0"		
	2870	5470	2'8"x7'0"	5'4"x7'0"				2870	5470	2'8"x7'0"	5'4"x7'0"		
	3070	6070	3'0"x7'0"	6'0"x7'0"				3070	6070	3'0"x7'0"	6'0"x7'0"		
	3470	6870	3'4"x7'0"	6'8"x7'0"				3470	6870	3'4"x7'0"	6'8"x7'0"		
	3870	7470	3'8"x7'0"	7'4"x7'0"				3870	7470	3'8"x7'0"	7'4"x7'0"		
 PANEL DOOR	2068	4068	2'0"x6'8"	4'0"x6'8"	100 Sq. Inches Max. Each Wall Opng.	1½-Hour "B" Label Not Rated	 MEDALLION DOOR	2068	4068	2'0"x6'8"	4'0"x6'8"	720 Sq. Inches Max. Each Glass Opng.	¾-Hour "E" Label Not Rated
	2668	5068	2'6"x6'8"	5'0"x6'8"				2668	5068	2'6"x6'8"	5'0"x6'8"		
	2868	5468	2'8"x6'8"	5'4"x6'8"				2868	5468	2'8"x6'8"	5'4"x6'8"		
	3068	6068	3'0"x6'8"	6'0"x6'8"				3068	6068	3'0"x6'8"	6'0"x6'8"		
	3468	6868	3'4"x6'8"	6'8"x6'8"				3468	6868	3'4"x6'8"	6'8"x6'8"		
	2070	4070	2'0"x7'0"	4'0"x7'0"				2070	4070	2'0"x7'0"	4'0"x7'0"		
	2670	5070	2'6"x7'0"	5'0"x7'0"				2670	5070	2'6"x7'0"	5'0"x7'0"		
	2870	5470	2'8"x7'0"	5'4"x7'0"				2870	5470	2'8"x7'0"	5'4"x7'0"		
	3070	6070	3'0"x7'0"	6'0"x7'0"				3070	6070	3'0"x7'0"	6'0"x7'0"		
	3470	6870	3'4"x7'0"	6'8"x7'0"				3470	6870	3'4"x7'0"	6'8"x7'0"		
	3870	7470	3'8"x7'0"	7'4"x7'0"				3870	7470	3'8"x7'0"	7'4"x7'0"		

"250° rating" means that the heat transmission through the door at the end of 30 minutes during the fire test was less than 250°F.

"650° rating" means that the heat transmission through the door at the end of 30 minutes during the fire test was less than 650°F.

"Not rated" means that the heat transmission through the door at the end of 30 minutes during the fire test was more than 650°F.

See page—11-d for ordering procedures.

Underwriters' Labelled Doors—Frames and Hardware

UNDERWRITERS' LABEL APPLICATION TABLE	
LABEL RATING	TYPICAL LOCATIONS
3-Hour (A) Label 250° or 650° Rated	Firewalls, Division Walls, Inflammable Areas, Areas with Hazardous Content.
1½-Hour (B) Label 250°, 650° or not Rated	Openings in Vertical Shaft, Stairwell, and Elevator Shaft.
1½-Hour (D) Label 250°, 650° or not Rated	Exterior Wall Openings, Fire Escapes.
¾-Hour (C) Label—Not Rated	Corridor or Room Partition Openings.
¾-Hour (E) Label—Not Rated	Exterior Wall Openings Subject to Moderate Exposure.

FIRE DOOR RATINGS

The rating of 3-hour, 1½-hour or ¾-hour indicates the duration of exposure to the fire. The letters A, B, C, D and E following the hourly rating, designate the location for which the assembly is designed.

The 250°, 650° and Not Rated classifications, indicate the maximum heat transmission through the door at 30 minutes of fire test. The Not Rated classification, indicates a temperature rise in excess of 650° at 30 minutes of fire test.

The required heat transmission classification is to be indicated by the architect or contractor after consulting with the local fire code officials.

Local fire codes in the various cities and towns, should always be examined before various fire door label ratings are specified.

ORDERING PROCEDURE: All Underwriters' doors and frames use the same identification letters and numbers as the standard doors and frames with the following prefix added:

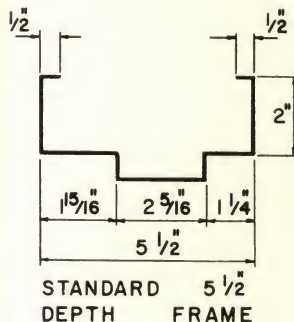
DOORS ONLY

A2 —3-hour "A" label door with a 250° rating.
A6 —3-hour "A" label door with a 650° rating.
B2 —1½-hour "B" label door with a 250° rating.
B6 —1½-hour "B" label door with a 650° rating.
BN —1½-hour "B" label door with no rating.
CN —¾-hour "C" label door with no rating.
D2 —1½-hour "D" label door with a 250° rating.
D6 —1½-hour "D" label door with a 650° rating.
DN —1½-hour "D" label door with no rating.
EN —¾-hour "E" label door with no rating.

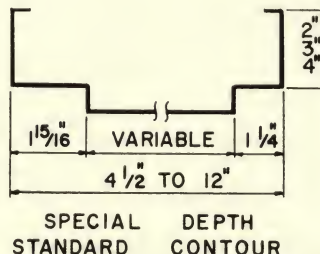
FRAMES

All frames are prefixed with the letter "U".

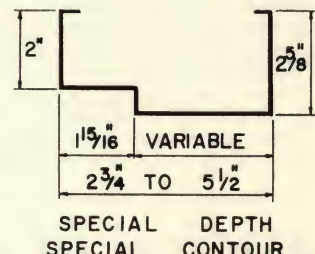
Door Examples—A6-F3070M, A2-2868M or BN-P3470M. Frame Examples—U-3070, U-2868 or U-3470.



STANDARD 5 1/2
DEPTH FRAME



SPECIAL DEPTH
STANDARD CONTOUR



SPECIAL DEPTH
SPECIAL CONTOUR

Ceco Underwriters' Labelled Frames are available in standard 5½" depth (knock-down) construction of #16 gauge steel. Special depth frames as illustrated, are available in #16 gauge or #14 gauge steel with all welded construction when required.

HARDWARE—①

This insignia will appear throughout the hardware section of this catalog. All hardware that shows this insignia can be used on Underwriters' Labelled Doors and Frames. Hardware that does not show this insignia in this catalog, cannot be used on label doors under any circumstances.

Under the label procedure issued by the Underwriters' Laboratories, Ceco is permitted to prepare doors and frames for hardware only as approved by the National Board of Fire Underwriters. Doors and frames prepared for hardware, not approved, will be rejected by the Underwriters' inspector prior to shipment. Hardware added by the contractor after receipt of approved material, can cause complete rejection of the opening by the local authorities, if the hardware is not in full compliance with their requirements.

Three hour (A) Labelled Doors must be shipped with the lockcase installed in the door and hinges must be applied to the hinge cutouts. The frame must be shipped with the lock-strike plate attached. Items such as door closers, kickplates, surface bolts and etc., are not required to be mounted.

Note. (A) Label three hour fire doors over 3'0" in width, must use number 2624 or 2724 extra heavy steel hinges. See page 24-D.

GLAZED OPENINGS

(A) Three hour (A) Labelled Doors must be all metal with no glazing permitted.

(B) One and one-half hour (B) Labelled Doors can have 100 square inches of glass area on any one door opening. Double doors can have 100 square inches of glass in the active leaf with none in the inactive leaf, or 50 square inches of glass area in each door leaf. Only one glass opening is permitted on any one door leaf. Two 50 square inch vision lights on one door leaf is not permitted. No glass opening dimension can exceed 12 inches.

(D) One and one-half hour (D) Labelled Doors must be all metal with no glazing permitted.

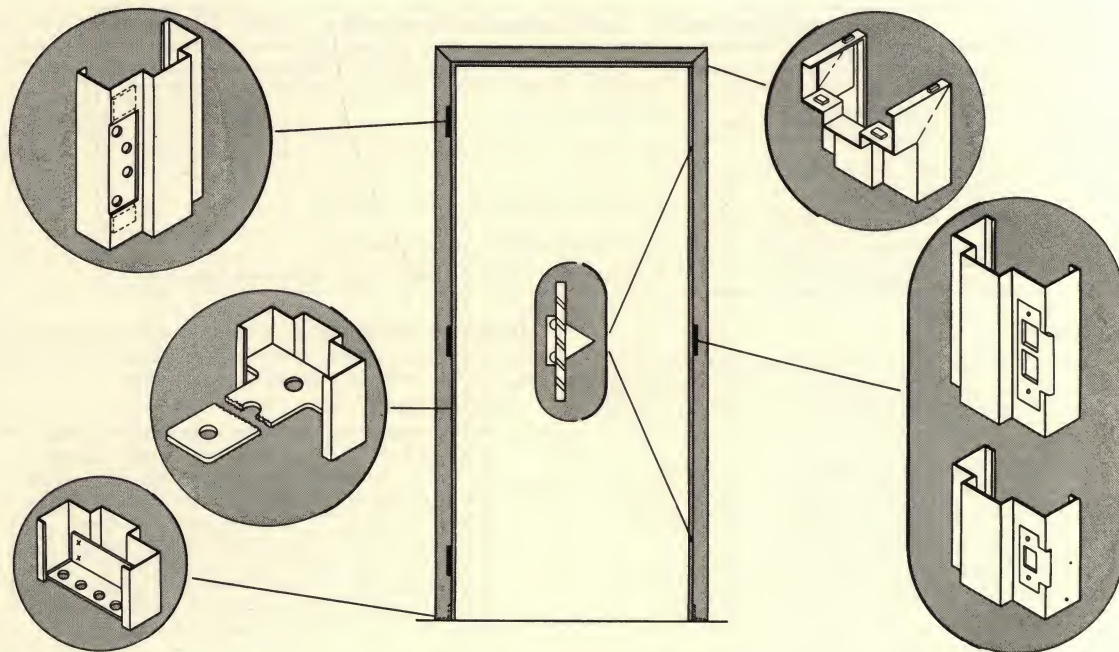
(C) Three-quarter hour (C) Labelled Doors can have 1296 square inches of glass area for each glass opening. There are no restrictions on the number of glass openings per each door leaf, as long as no dimension exceeds 54 inches.

(E) Three-quarter hour (E) Labelled Doors can have 720 square inches of glass area for each glass opening. There are no restrictions on the number of glass openings per each door leaf, as long as no dimension exceeds 54 inches.

Note. All glass openings must be glazed with wire glass.



Hollow Metal Door Frames



Ceco Hollow Metal Door Frames can be used with Medallion, Flush Panel and Panel doors.

Frames are formed from No. 16 gauge steel sheet $5\frac{1}{2}$ " deep with 2" face and $\frac{3}{8}$ " integral stop.

Head corners are mitred for best possible appearance. Standard size frames have die cut mitred corners with steel tabs for quick assembly. Frames are shipped knocked-down.

Frames are mortised and reinforced for hinges.

Frames are mortised for cylindrical type lock strikes or mortised type lock strikes as required.

Dust boxes (sometimes called plaster guards) are provided to protect hinge and lock strike preparations during installation.

Air cushion gum rubber mutes (2) are furnished with each frame.

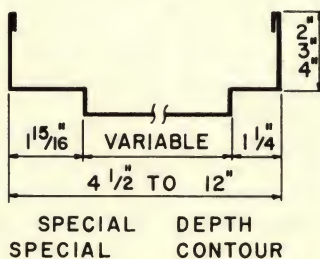
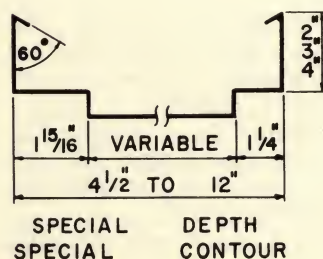
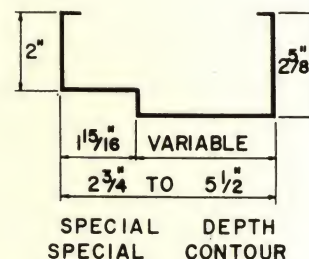
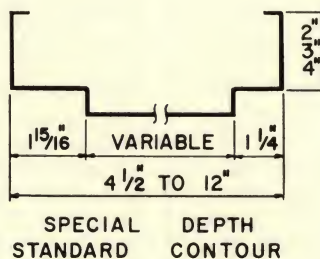
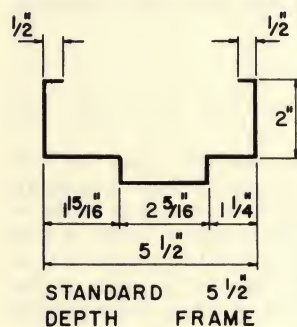
Six adjustable masonry anchors are furnished with each frame, three to be used on each jamb.

Ceco standard door frames with standard lock mortises can be used with $1\frac{3}{4}$ " thick wood doors (see hardware section for hardware for wood doors).

Frames are bonderized and flow-coat painted one prime coat of rust-inhibitive zinc chromate neutral grey color.

Standard door frames $5\frac{1}{2}$ " depth are carried in stock in company warehouses. Transom frames, sidelights, and borrowed lights are manufactured to order. Special depth frames are available when required.

FRAMES: STANDARD AND SPECIAL DEPTH OR CONTOUR

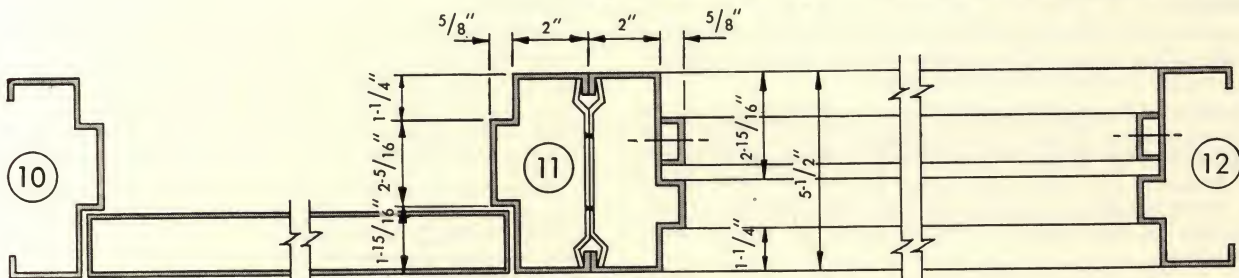
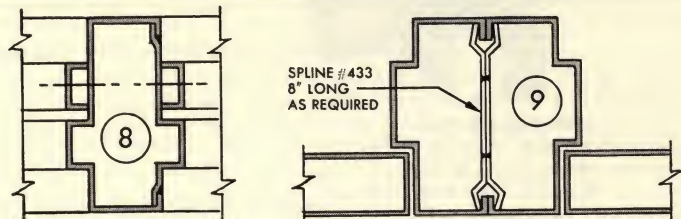
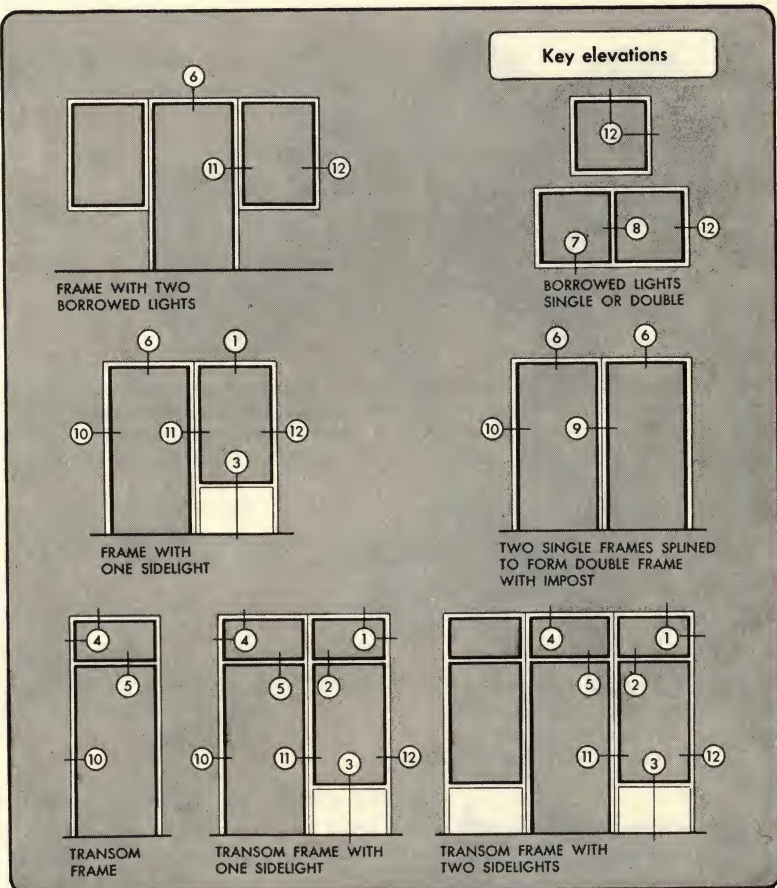
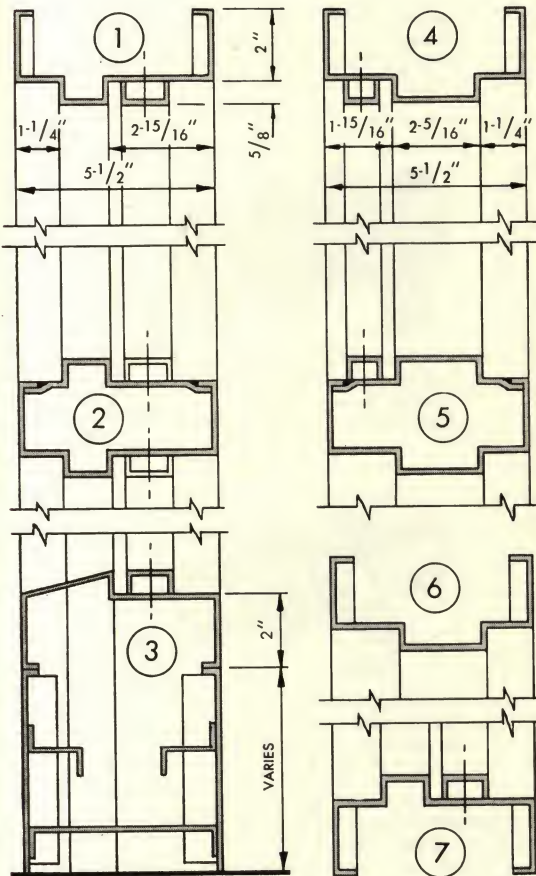


All frames shown are fabricated from No. 16 gauge cold-rolled steel sheets. Frames other than the Ceco $5\frac{1}{2}$ " standard depth are shipped with welded corners. When specifying special depth or contour frames, be sure to indicate depth and contour required. For contours other than those shown, consult Ceco's Chicago door engineering department.

No. 14 gauge frames can be furnished when required.

Sidelights • Borrowed Lights • Transom Frames

construction details

scale $3/16'' = 1'-0''$ 

Ceco Transom Frames, Sidelights and Borrowed Lights are designed to furnish completely welded-up units, with all corners welded and ground smooth, that can be easily and accurately installed adjacent to each other to obtain the best possible finished appearance and strength.

Rooms within rooms or partitions can be built using Ceco Transom Frames and Borrowed Lights to the ceiling with masonry wall below the Borrowed Lights.

TRANSOM DOOR FRAMES are fabricated on order for standard size doors to any height up to $14'-0''$, and any depth to meet job requirements. Standard $5-1/2''$ depth is lower in cost than special depths. Can be furnished in fixed glazed, fixed or ventilated sash or with metal panels.

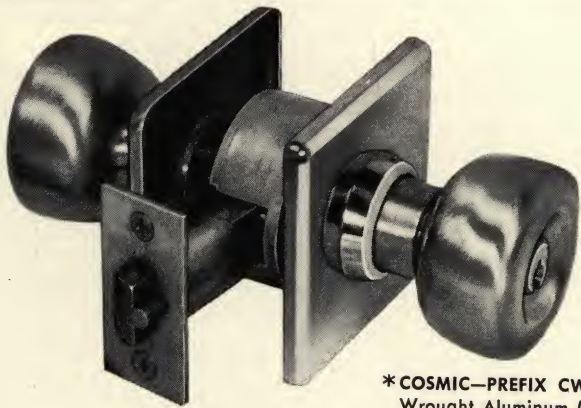
SIDELIGHTS are fabricated on order to fit adjacent to standard or transom frames to widths up to $8'-0''$ and only in $5-1/2''$ depth. Can be furnished with muntins or horizontal impost (Section 5) as required. Bottom panel furnished to match glass heights in Doors (FG, LG, G). Sidelights with panels to height of glass in G Doors furnished only up to $4'-0''$ in width. Multiple sidelights can be used adjacent to each other.

BORROWED LIGHTS are fabricated on order in any size and depth to meet job requirements. Standard $5-1/2''$ depth to match standard frames are lower in cost than special depths. Borrowed Lights can be used in multiples for long runs and can be furnished with corner plates where required.

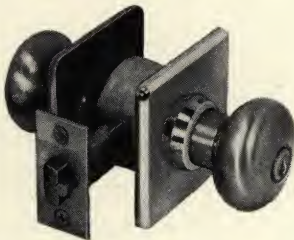
Borrowed Lights used in exterior walls or in exterior entrances, with masonry below (Short Sidelight) or clear to floor can be furnished with sill section as used in Sidelights (Section 3).



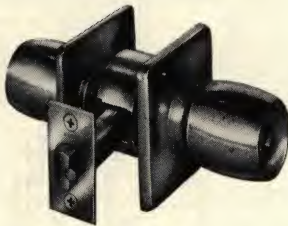
Standard Duty Cylindrical Locksets



***COSMIC—PREFIX CWS**
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knobs 2 1/8" Dia. Rose 3" Square



HADDAM—PREFIX HWS
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knob 2 1/8" Dia. Rose 3" Square



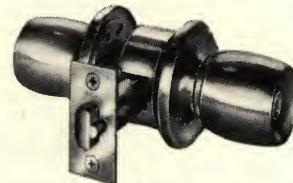
TEMPO—PREFIX TWS
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knob 2 1/8" Dia. Rose 3" Square



COSMIC—PREFIX CWR
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knobs 2 1/8" Dia. Rose 2 5/8" Dia.



HADDAM—PREFIX HWR
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knobs 2 1/8" Dia. Rose 2 5/8" Dia.



TEMPO—PREFIX TWR
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knob 2 1/8" Dia. Rose 2 3/4" Dia.

**Cosmic Wrought Square design locksets (prefix CWS) carried in stock in company warehouses or Chicago in dull bronze (US10) and aluminum (US28) finishes — KD, KA, MKA, and MKD. (Other locks shown on this page, other finishes, and special keying are all manufactured to order — consult Ceco district sales office for delivery time.)*

GENERAL

Standard Duty Cylindrical Locks are recommended for commercial industrial and office locations where normal frequency of operation is planned and expected.

Standard Duty Cylindrical Locksets are designed and engineered to assure long life and resistance to wear. Dual brass on steel bearings in each knob provide rigid knob assembly and prevent knob wobble and assure longer life. Self aligning thrust bearing on spindle prevents knob binding. Latch retraction carriage glides on ball bearings for smooth easy knob action.

Standard Duty Cylindrical Locksets fit standard preparation in Ceco doors and frames. Backset 2 3/4" Front 1 1/8" x 2 1/4". Locksets for steel doors are furnished with flat fronts and all machine screws. Locks for wood doors and Ceco frames are furnished with bevelled front 1/8" in 2" and with wood screws for lock, machine screws for strikes.

Standard Duty Cylindrical Locksets can be furnished keyed alike, keyed different, or master-keyed with Heavy Duty Cylindrical Locksets and Heavy Duty Mortise Locksets as required.

These locks can be furnished only with Russell & Erwin key systems. They cannot be keyed to other manufacturers' keys.

They are reversible for any hand and swing of door. Cylinders can be reversed in the field so that key slot is in the correct position for any hand of door.

ORDERING

When ordering locks always give the complete number, including finish. When ordering locksets the letter prefix shown under the illustrations denotes the design. The operation of each lockset is denoted by number as shown on page 15-d. The complete number of any one lockset is, for example: CWS-340 KA-US28.

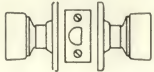
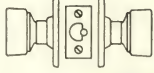
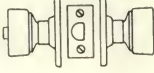
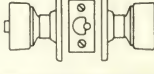
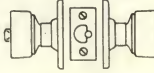
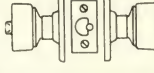
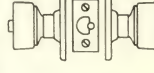




If lockset is required to be keyed different the "KA" would change to "KD". If master-keyed, the KA would change to MKA or MKD as required.

FINISHES

US28—Alumilited Satin Finish on Aluminum
US10—Dull Bronze Finish on Bronze
US26—Polished Chrome Plate on Brass
US26D—Dull Chrome Plate on Brass

Split finishes can be furnished on order. Always give hand and swing of door and finish required on outside so that finish of strike will match outside trim. When locks with keys and/or buttons are used with split finishes, state which side gets which finish. For example: CWS-340 KD-US28 key side — US26 button side for LHI Door.

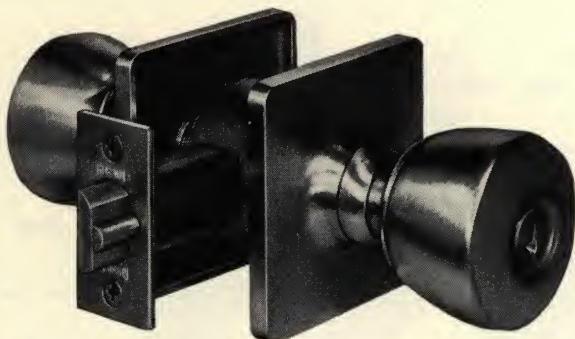
In this example the strike would be finished in US26. Standard Duty Cylindrical locksets cannot be used on Underwriters Labelled Doors.

CECO Number	GOV. Number	SILHOUETTE	OPERATION
310 *	160-N		FOR PASSAGE DOORS Latch bolt by knob either side. Each knob always free.
314 *	160-NX		FOR EXIT DOORS Latch bolt by knob inside only. Inside knob always free. Outside knob fixed. Dead locking latch.
320 *	160-L		FOR BATHROOM Latch bolt by knob each side. Inside knob always free. Push button dead locks outside knob. Push button released by turning inside knob or closing door...also released by emergency key through outside knob. Stocked in split finish US10/US26 and US28/US26.
322 *	160-P		FOR INNER OFFICE DOORS Latch bolt by knob either side. Push button dead locks outside knob. Inside knob always free. Turning inner knob or closing door releases push button. Dead locking latch.
326 *	160-Q		FOR EXIT DOORS Latch bolt by knob either side. Turn button locks or unlocks outside knob. Inside knob always free. Dead locking latch.
328 *	160-M		FOR COMMUNICATING OR OFFICE DOORS Latch bolt by knob either side. Turn button in either knob locks both knobs. Door can be opened only when turn buttons on both sides are in unlocked position. Dead locking latch.
335 *	160-E		FOR RESTROOMS AND PUBLIC STATION DOORS Latch bolt by knob either side. Inside knob push button locks outside knob. Latch bolt retracted by key in outside knob. Locking button released by turning inside knob, by key in outside knob or by closing door. Locking button has slot in head. Can be fixed in locked position by turning button with a screw driver or coin. Dead locking latch.
340 *	160-A		FOR FRONT, REAR, AND OFFICE DOORS Latch bolt by knob each side. Inside knob always free. Turn button dead locks outside knob. Key retracts latch bolt when outside knob is locked. Dead locking latch.
340-58 *	160-R		FOR CLASSROOM, VESTIBULE AND UTILITY ROOM DOORS Latch bolt by knob either side. Inside knob always free. Outside knob dead locked by key in outside knob. Dead locking latch.
346 *	160-B		FOR OFFICE DOORS Latch bolt by knob either side. Push button dead locks outside knob. Inside knob always free. Turning inside knob releases push button. Key retracts latch bolt and releases push button. Dead locking latch. Closing door does not release push button.
352 *	160-D		FOR UTILITY ROOM, STOREROOM AND EXIT DOORS Latch bolt by inside knob only. Outside knob fixed. Latch bolt may be retracted by key in cylinder in outside knob. Dead locking latch.

* These locksets carried in company warehouses or Chicago stocks in Cosmic Wrought Square design (prefix CWS) in dull bronze (US10) and aluminized aluminum (US28) finishes — KD, KA, MKA, or MKD.

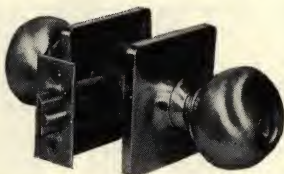


Heavy Duty Cylindrical Locksets



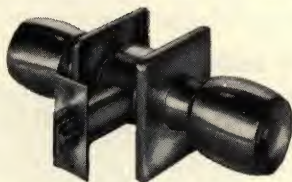
***COSMIC-PREFIX CWS**
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knobs $2\frac{3}{16}$ " Dia. Rose 3" Square

FLARE-PREFIX (FCS)
Cast Aluminum (US28)
Cast Bronze (US10)
Rose 3" Square



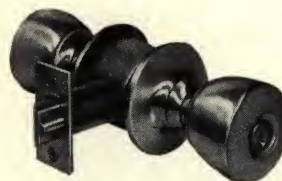
HADDAM-PREFIX HWS
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knobs $2\frac{3}{16}$ " Dia. Rose 3" Square

BRISTOL-PREFIX BCS
Cast Aluminum (US28)
Cast Bronze (US10)



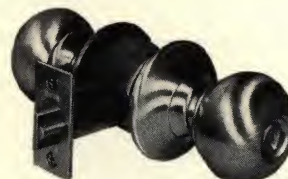
TEMPO-PREFIX TWS
Wrought Aluminum (US28)
Wrought Bronze (US10)

COMET-PREFIX CCS
Cast Aluminum (US28)
Cast Bronze (US10)
Knob Dia. $2\frac{3}{16}$ " Rose 3" Square



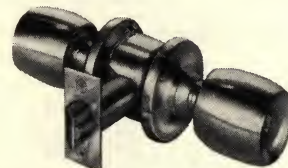
COSMIC-PREFIX CWR
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knobs $2\frac{3}{16}$ " Dia. Rose $2\frac{5}{8}$ " Dia.

FLARE-PREFIX FCR
Cast Aluminum (US28)
Cast Bronze (US10)



HADDAM-PREFIX HWR
Wrought Aluminum (US28)
Wrought Bronze (US10)
Knobs $2\frac{3}{16}$ " Dia. Rose $2\frac{5}{8}$ " Dia.

BRISTOL-PREFIX BCR
Cast Aluminum (US28)
Cast Bronze (US10)



TEMPO-PREFIX TWR
Wrought Aluminum (US28)
Wrought Bronze (US10)

COMET-PREFIX CCR
Cast Aluminum (US28)
Cast Bronze (US10)
Knob Dia. $2\frac{3}{16}$ " Rose $2\frac{3}{4}$ " Dia.

*Cosmic Wrought Square design locksets (prefix CWS) carried in stock in company warehouses or Chicago in dull bronze (US10) and aluminited aluminum (US28) finishes — KD, KA, MKA, and MKD. (Other locks shown on this page, other finishes, and special keying are all manufactured to order — consult Ceco district sales office for delivery time.)

GENERAL

Heavy Duty Cylindrical Locksets are recommended for schools, hospitals, commercial, industrial and institutional buildings. Designed for high-frequency locations, and to give long life under hard service. Knob shanks are of seamless tubular design to obtain full torsional strength. Wrought knobs are reinforced to prevent denting and to give strength equivalent to that of cast knobs. Outside roses are tamper proof.

Flare, Bristol and Comet Designs have cast knobs and cast roses. They can be furnished with cast knobs and wrought roses where cost is a factor, yet cast knobs are desired. The prefix to the lock number would then change, for example: Flare Design with cast rose is FCR or FCS. With wrought rose the prefix would be FWR or FWS.

Heavy Duty Cylindrical Locksets fit standard preparation in Ceco doors and frames. Backset $2\frac{3}{4}$ " Front $1\frac{1}{8}$ " by $2\frac{1}{4}$ ". Locksets for steel doors are furnished with flat fronts and all machine screws. Locks for wood doors and Ceco frames are furnished with bevelled front $\frac{1}{8}$ " by 2" and with wood screws for lock, machine screws for strikes.

Heavy Duty Cylindrical Locksets can be furnished keyed alike, keyed different or master keyed with Standard Duty Cylindrical Locksets and Heavy Duty Mortised Locksets as required.

These locks can be furnished only with Russell & Erwin key systems. They cannot be keyed to other manufacturers' keys.

They are reversible for any hand and swing of door. Cylinders can be reversed in the field so that key slot is in the correct position for any hand of door.

ORDERING

When ordering locks always give the complete number including finish. The letter prefix shown under the illustrations denotes the design and whether roses are wrought or cast. The design name and letter denotes when knobs are wrought or cast. The prefix letters also denote where the rose is round or square.

The operation of each lockset is denoted by number as shown on page 17-d. The complete number of any one lockset is, for example:

CWS - 440KA - US28

If lockset is required to be keyed different the KA would change to KD if master keyed the KA would change to MKA or MKD as required.

FINISHES

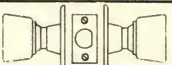
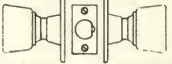
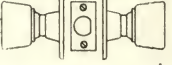
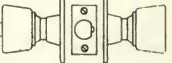
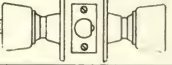
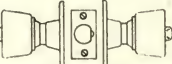

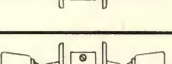


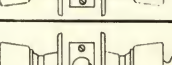


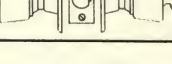
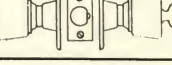
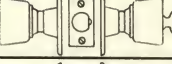

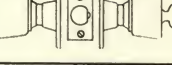
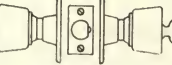
US28—Aluminited Satin Finish on Aluminum
US10—Dull Bronze Finish on Bronze
US26—Polished Chrome Plate on Brass
US26D—Dull Chrome Plate on Brass

Split finishes can be furnished on order. Always give hand and swing of door and finish required on outside so that finish of strike will match outside trim. When locks with keys and/or buttons are used with split finishes, state which side gets which finish. For example:

CWS - 440 KD - US28 key side—US26 button side for LHI Door

In this example the strike would be finished in US26.

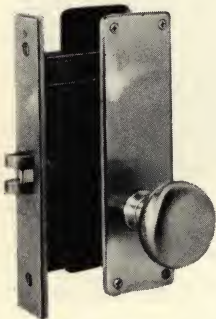
All locksets and latchsets shown on this page can be used with Underwriters Labelled Doors except No. H-440-58.

CECO NUMBER	GOV. NUMBER	SILHOUETTE	OPERATION
410 * ①	161-N		FOR PASSAGE DOORS Latch bolt by knob either side. Each knob always free.
414 ①	161-NX		FOR EXIT DOORS Latch bolt by knob inside only. Inside knob always free. Outside knob fixed. Dead locking latch.
420 * ①	161-L		FOR BATHROOM Latch bolt by knob each side. Inside knob always free. Push button dead locks outside knob. Push button released by turning inside knob or closing door . . . also released by emergency key through outside knob. Stocked in split finish US10/US26 and US28/US26.
422 * ①	161-P		FOR BEDROOM AND INNER OFFICE DOORS Latch bolt by knob either side. Push button dead locks outside knob. Inside knob always free. Turning inner knob or closing door releases push button. Dead locking latch.
426 ①	161-Q		FOR EXIT DOORS Latch bolt by knob either side. Turn button locks or unlocks outside knob. Inside knob always free. Dead locking latch.
428 ①	161-M		FOR COMMUNICATING HOTEL OR OFFICE DOORS Latch bolt by knob either side. Turn button in either knob locks or unlocks opposite knob. Dead locking latch. To prevent accidental lockout, this lock should not be used on doors between rooms which have no other entrance.
433EM ①	161-H		FOR HOTEL CORRIDOR DOORS Latch bolt by key only outside and knob inside. Outside knob always rigid. Push button shuts off all keys except emergency key and throws out visual occupancy indicator in face of cylinder. Either closing door or operating inside knob will release the shutout mechanism and retract the visual occupancy indicator unless button has been turned with spanner key fixing it in locked position.
440 * ①	161-A		FOR FRONT, REAR AND OFFICE DOORS Latch bolt by knob each side. Inside knob always free. Turn button dead locks outside knob. Key retracts latch bolt when outside knob is locked. Dead locking latch.
440-58 * ①	161-R		FOR CLASSROOM, VESTIBULE AND UTILITY ROOM DOORS Latch bolt by knob either side. Inside knob always free. Outside knob dead locked by key in outside knob. Dead locking latch.
H440-58 *	NONE		FOR CLASSROOM, VESTIBULE AND UTILITY ROOM DOORS WITH LATCH HOLD-BACK Same as 440-58 but may be locked with bolt in retracted position.
446 ①	161-B		FOR OFFICE DOORS Latch bolt by knob each side. Push button deadlocks outside knob. Inside knob always free. Turning inside knob releases push button. Key retracts latch bolt and releases push button. Dead locking latch. Closing door does not release push button.
446-12 * ①	161-C		FOR APARTMENT, OFFICE BUILDING AND CORRIDOR DOORS Latch bolt by knob each side. Inside knob always free. Outside knob dead locked by key in inside knob. Key in outside knob retracts latch bolt when outside knob is locked. Dead locking latch.
448-12 ①	161-G		FOR ENTRANCE AND COMMUNICATING DOORS Latch bolt by knob either side except when both knobs are locked simultaneously by key in either knob. When both knobs are locked from either side, key from either side will unlock both knobs. Dead locking latch.
450-12 ①	161-F		CYLINDER COMMUNICATING HOTEL OR OFFICE DOORS Latch bolt by knob either side. Key in each knob locks or unlocks opposite knob. Dead locking latch. To prevent accidental lockout, this lock should not be used on doors between rooms which have no other entrance.
452 * ①	161-D		FOR UTILITY ROOM, STOREROOM AND EXIT DOORS Latch bolt by inside knob only. Outside knob fixed. Latch bolt may be retracted by key in cylinder in outside knob. Dead locking latch.
452-12 ①	161-W		FIXED KNOB LOCK FOR PASSAGE DOORS Latch bolt by key from either side. Both knobs fixed. Dead locking latch.
453 ①	161-T		FOR DORMITORY BEDROOMS AND PUBLIC RESTROOM DOORS Latch bolt by knob either side. Inside knob always free. Push button deadlocks outside knob. Turning inside knob or closing door releases push button. Key releases push button and unlocks outside knob. Key in outside knob can also be used to lock outside knob. Dead locking latch.
456 ①	161-U		FOR COMMUNICATING DOORS Latch bolt by knob either side. Pushing in button in inside knob locks outside knob. Locking button released by key from outside, knob from inside or closing door. Both knobs locked by key in outside knob. Dead locking latch.
456-12 ①	161-S		FOR COMMUNICATING DOORS Latch bolt by knob either side except when key in either knob locks its own knob only. Dead locking latch.

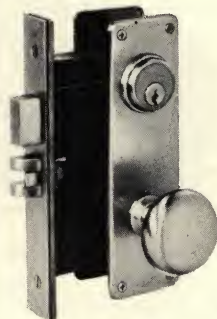
*These locksets carried in company warehouses or Chicago stocks in Cosmic Wrought Square design (prefix CWS) in dull bronze (US10) and aluminized aluminum (US28) finishes — KD, KA, MKA, or MKD. (Other locks shown on this page, other finishes, and special keying are all manufactured to order — consult Ceco district sales office for delivery time.)



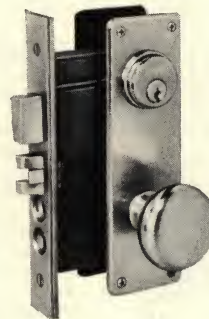
Heavy Duty Mortise Locksets



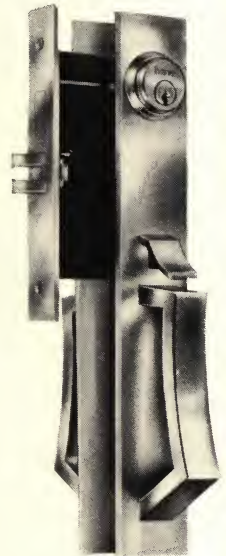
No. 5110



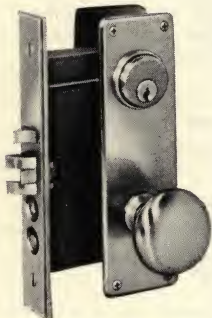
No. 5211



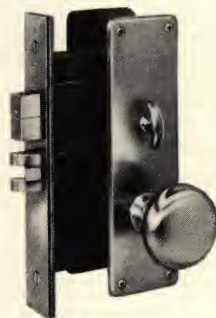
No. 5221



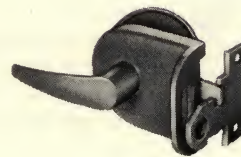
No. 5251



No. 5311



No. 5231



No. 1500

GENERAL

Ceco Mortised Locksets are heavy duty commercial grade. Russell & Erwin "Ten Strike" 2000 series, Federal Specifications Series 86, and should not be compared to standard or lighter grades of mortised locksets.

All latch bolts are anti-friction type for easy closing operation and long life.

Doors and frames are accurately die cut and reinforced for rigid attachment of locks and strikes.

All locksets are reversible and interchangeable in the standard lock mortise.

These locksets can be used with $1\frac{3}{4}$ " wood doors and Ceco metal frames. The adjustable bevel front permits use of the lock with the front flat for Ceco Hollow Metal Doors, or with the front bevelled for $1\frac{3}{4}$ " wood doors.

Locksets for Ceco Hollow Metal Doors are furnished with machine screws. Locksets for wood doors are furnished with wood screws for lockset and machine screws for strike.

KEYING

All Heavy Duty Locksets use single cam, ball-bearing pin tumblers, cast bronze $1\frac{1}{4}$ " long 1.153" 32 U. S. thread. Furnished with two keys for each cylinder. Cylinders by other lock manufacturers with the same thread can be used with Ceco Mortised locks, which are furnished with or without key cylinders. All locks take cylinders with cloverleaf cams, except lockset No. 5321 which takes key cylinder with standard cam.

Key cylinders are furnished Keyed Alike (KA) or Keyed Different (KD) or Master-Keyed as required.

When locks must be keyed to an existing masterkey system other than Ceco, cylinders must be obtained from the manufacturer and Ceco locks will be furnished without cylinders.

FINISHES

US28—Alumilited Aluminum

US10—Dull Bronze

US26D—Dull Chrome

US26—Polished Chrome

ORDERING

When ordering Mortise Locksets always give the complete number, which is the operation number shown on page 19, followed by the keying information, followed by the finish. For example: 5211-KD-US28.

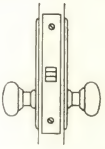
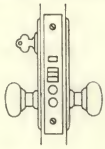
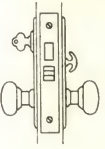
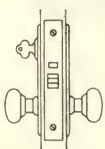
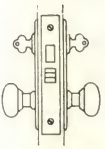
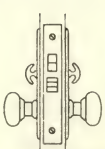
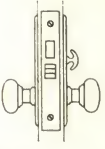
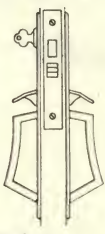
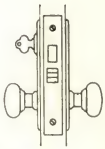
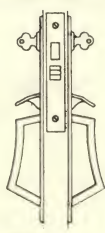
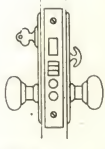
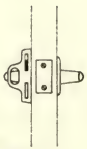
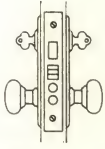
When ordering locks without key cylinders the number should read 5211-NC-US28.

When laying out hardware schedules for jobs with key alike, key different and master keys use the listing 5211-US28 and furnish keying list or diagram.

UNDERWRITERS' DOORS

All locksets and latches shown on this page can be used with Underwriters' labelled doors except the No. 1500 surface latch.

Locks shown on this page are the most popular functions and meet most occupational requirements. Other functions of the Russwin Heavy Duty "Ten Strike" 2000 Series (Rockford Design) are available upon request. Russwin 2000 Series locksets are modified for Ceco to function properly in Ceco Doors, and to fit door preparation accurately.

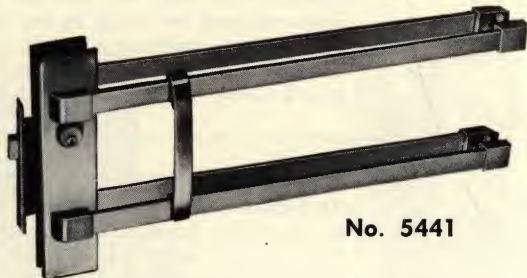
SILHOUETTE	OPERATIONS	SILHOUETTE	OPERATIONS
 <p>Gov. Number 86N-4 Ceco Number *5110^①</p>	5110—FOR DOORS NOT REQUIRING LOCKS. Latch Bolt operated by knobs both sides. No locking feature. Used to latch door closed.	 <p>Gov. Number 86E-4 Ceco Number *5311^①</p>	5311 — FOR OFFICES, EXITS AND STAIR WELLS. Latch bolt operated outside when stops are not set, by key when stops are set. Latch bolt by inside knob at all times. Cannot be locked from inside. Auxiliary bolt deadlocks latch bolt.
 <p>Gov. Number 86B-4 Ceco Number *5211^①</p>	5211—FOR ROOMS WITH ONE DOOR AND GENERAL USE. Latch Bolt operated by knobs both sides, dead-bolt operated by key outside, by thumb turn inside.	 <p>Gov. Number 86J-4 Ceco Number *5321^①</p>	5321—FOR SCHOOL CLASSROOM AND EXITS. Latch bolt operated outside by knob when interior stops are not set by key, by key when stops are set. Latch bolt operated inside by knob at all times. Cannot be locked from inside. Auxiliary bolt deadlocks latch.
 <p>Gov. Number 86C-4 Ceco Number *5212^①</p>	5212 — FOR DOORS REQUIRING LOCKING BOTH SIDES. Latch Bolt operated by knobs both sides. Dead-bolt operated by key cylinder both sides.	 <p>Gov. Number 86M-4 Ceco Number *5231^①</p>	5231 — FOR COMMUNICATING DOORS. Latch bolt by knob either side when thumb turns are inactive. Split dead-bolt by thumb turn opposite sides. Can be locked from either side. Cannot be unlocked from opposite side.
 <p>Gov. Number 86L-4 Ceco Number *5213^①</p>	5213—FOR TOILET DOORS. Latch bolt operated by knobs both sides. Dead bolt operated by thumb turn inside. No key cylinder operations outside.	 <p>Gov. Number 123 Ceco Number *5251^①</p>	5251—FOR ENTRANCE DOORS. Latch bolt by thumb piece both sides, dead-bolt operated by key cylinder outside. Cylinder can be placed on inside if desired.
 <p>Gov. Number NONE Ceco Number *5214^①</p>	5214—FOR METER ROOMS AND ISOLATED DOORS. Latch bolt operated by knobs both sides. Dead bolt operated by key cylinder outside only.	 <p>Gov. Number 123A Ceco Number *5252^①</p>	5252—FOR ENTRANCE DOORS. Latch bolt by thumb piece both sides, dead-bolt operated by key cylinder both sides. Door can be locked from either side.
 <p>Gov. Number 86A-4 Ceco Number *5221^①</p>	5221—FOR OFFICES, FRONT DOORS AND ENTRANCES. Latch bolt operated by knobs outside when stops are not set, by key when stops are set, inside by knob. Dead-bolt operated outside by key, inside by thumb turn.	 <p>Gov. Number NONE Ceco Number *1500^①</p>	1500—SURFACE LATCH. Latch bar operated by lever handles both sides. Padlock eyes in latch and strike. Padlock not furnished. Reversible. Fits doors and frames prepared for cylindrical locks only. Case with latch bar and padlock eyes mounted on hinge side of door. Case, lever handles and escutcheon cast brass. Latch bar and strike manganese brass.
 <p>Gov. Number NONE Ceco Number *5222^①</p>	5222—FOR OFFICES AND ENTRANCES. Latch bolt operated outside by knob when stops are not set, by key when stops are set, inside by knob. Dead-bolt operated by key both sides.	<p>Ceco entrance locksets No. 5251 and 5252 are furnished with solid extruded bronze or aluminum pull plates 2½" x 14". The handles are solid bronze or aluminum contoured to fit the hand. The lockset is fastened to the door by use of through bolts, with no screws removable from the exterior side of the door.</p> <p>All Ceco mortise knob operated locksets, are furnished with cast shank knobs and phillips head machine screws, for longer wear and neater appearance.</p>	

* Locksets carried in company warehouses or Chicago stocks in dull bronze (US10) and alumilited aluminum (US28) finishes—KD, KA, MKD, or MKA. Other finishes or special keying manufactured to order.



Heavy Duty Mortise Dead-Bolt Locksets

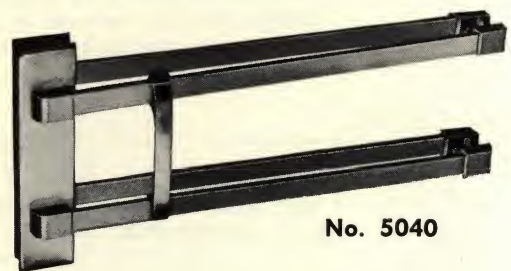
PUSH BAR AND PULL BAR DEAD-BOLT LOCKSET



No. 5441

This lockset is used on main entrances, is generally used on FG or LG type doors. Push Bars protect the long glass against accidental breakage and prevent marring by hands.

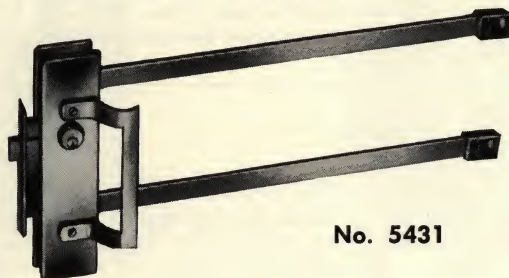
PUSH BAR AND PULL BAR SET



No. 5040

These bars are used on vestibule doors and in similar entrance locations where no lock is required. On double entrance doors use this set on one leaf with No. 5441 lockset on the other leaf.

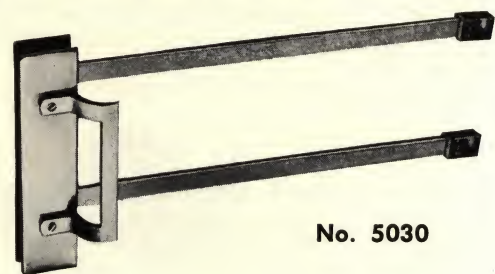
PULL HANDLE AND PUSH BAR DEAD-BOLT LOCKSET



No. 5431

This lockset is used on main entrances and is generally used with FG and LG type doors. This set is particularly offered for swing out FG or LG doors when full area of glass is desired for architectural effect, signs, lettering in glass, etc.

PULL HANDLE AND PUSH BAR SET



No. 5030

These bars are used on vestibule doors and similar entrance locations where no lock is required. On double entrance doors use this set on one leaf with No. 5431 lockset on the other leaf.

PUSH PLATE AND PULL PLATE



No. 5010

This set used on high frequency doors such as vestibules and locker rooms. On double entrance doors use this set on one leaf with lockset No. 5411 on the other leaf.

PUSH PLATE AND PULL PLATE DEAD-BOLT LOCKSET



No. 5411

This lockset is used on entrances, locker rooms, and other high frequency doors. This set is designed for good appearance on entrance doors as well as for interior doors.

DEAD-BOLT LOCKSET



No. 5421

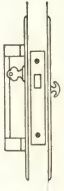
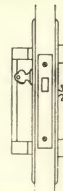
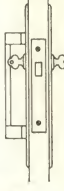
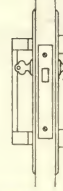
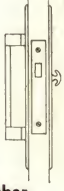

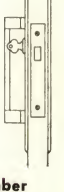

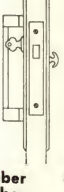
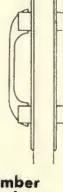
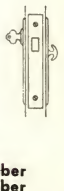

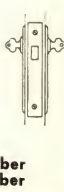
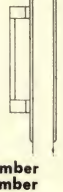
This lockset is used on doors normally closed and locked such as meter rooms, transformer vaults and access doors. Do not use door closers with this lock because the door can be opened only by pulling on key when turned in key cylinder.

Heavy Duty Mortise Locksets and Push and Pull Sets shown on this page are furnished in Alumilited Aluminum (US28), Dull Bronze (US10) or Dull Chrome (US26D) plated on Bronze.

All sets fit into standard CECO lock preparation in both doors and frames. Sets without locks are furnished with filler plates for the edge of the door and the strike preparation in the frame of the same material and finish.

Double doors in exterior walls with both leaves active use split astragal No. 4421; in interior walls the astragal can be omitted. Strike No. 555 is used on double doors to take the dead-bolt in the locked position.

When ordering all sets on this page give the complete number. For example: No. 5411-KA-US28. For bar sets also give the door width. For example: No. 5431-30-KA-US28 for a 3'-0" wide door.

SILHOUETTE	OPERATION	SILHOUETTE	OPERATION
 Gov. Number NONE Ceco Number *5411	5411—ENTRANCES, LOCKER ROOMS. Dead-bolt operated by key outside and by thumb turn inside. Use door closer with this lock. When door is unlocked operation is push and pull.	 Gov. Number NONE Ceco Number *5431	5431—ENTRANCE DOORS. Dead-bolt operated by key outside and by thumb turn inside. Use door closer with this lock. When door is unlocked operation is push and pull.
 Gov. Number NONE Ceco Number *5412	5412—ENTRANCES, LOCKER ROOMS. Dead-bolt operated by key both sides, use door closer with this lock. When door is unlocked operation is push and pull.	 Gov. Number NONE Ceco Number *5432	5432—ENTRANCE DOORS. Dead-bolt operated by key both sides, use door closer with this lock. When door is unlocked operation is push and pull.
 Gov. Number NONE Ceco Number *5413	5413—LOCKER ROOM AND TOILET DOORS. Dead bolt operated by thumb turn inside only. Use door closer with this lock. When door is in unlocked position, operation is push-pull.	 Gov. Number NONE Ceco Number *5441	5441—ENTRANCE DOORS. Dead-bolt operated by key outside and by thumb turn inside. Use door closer with this lock. When door is unlocked operation is push and pull.
 Gov. Number NONE Ceco Number *5414	5414—ENTRANCE DOORS. Dead bolt operated by key outside only. Use door closer with this lock. When door is in unlocked position, operation is push-pull.	 Gov. Number NONE Ceco Number *5442	5442—ENTRANCE DOORS. Dead-bolt operated by key both sides, use door closer with this lock. When door is unlocked operation is push and pull.
 Gov. Number 86-P Mod. Ceco Number *5415	5415—CLASSROOM DOORS. Dead bolt operated by key outside only. Inside thumb turn will retract, but will not project the dead bolt. Use door closer with this lock. When door is in unlocked position, operation is push-pull.	 Gov. Number NONE Ceco Number *5040	5040—VESTIBULES AND LOCKER ROOMS. Operation push and pull only. No locking or latching device. Door closer must be used.
 Gov. Number 86P Ceco Number *5421	5421—TRANSFORMER VAULTS, METER ROOMS, CLOSETS. Dead-bolt operated by key outside and by thumb turn inside. No latching device. Use of closer not recommended.	 Gov. Number NONE Ceco Number *5030	5030—VESTIBULES AND LOCKER ROOMS. Operation push and pull only. No locking or latching device. Door closer must be used.
 Gov. Number 86T Ceco Number *5422	5422—ACCESS DOORS AND STOCK ROOM DOORS. Dead-bolt operated by key both sides. Use of door closer not recommended. Door is free swinging when dead-bolt is retracted.	 Gov. Number NONE Ceco Number *5010	5010—VESTIBULES AND LOCKER ROOMS. Operation push and pull only. No locking or latching device. Door closer must be used.

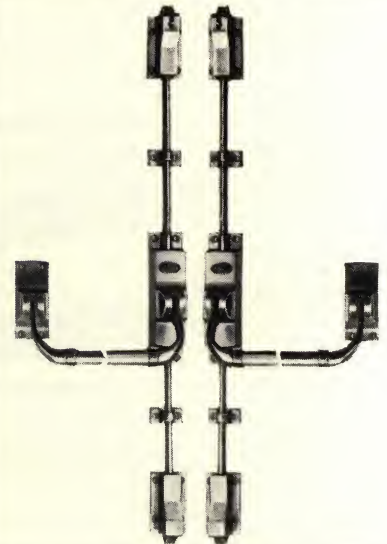
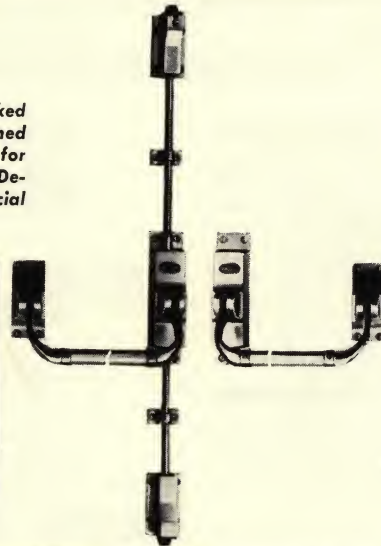
* Locksets carried in company warehouses or Chicago stocks in dull bronze (US10) and alumilited aluminum (US28) finishes—KD, KA, MKD, or MKA. Bars for doors larger than 3470 Leaf size on special order.



Anti-Panic Devices

Mortise, Combination and Vertical Rod devices stocked in Chicago. Doors prepared for these devices furnished from Chicago. Standard 5½" depth frames prepared for these devices furnished from company warehouses. Devices for doors larger than 3870 leaf size on special order. Stocked in Dull Bronze (US10) and Alumilited Aluminum (US28) finishes.

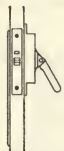
(RUSSWIN NO. 50 LINE)



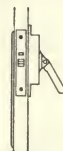
SINGLE DOOR MORTISE DEVICES

DOUBLE DOOR COMBINATION DEVICES

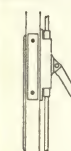
DOUBLE DOOR VERTICAL ROD DEVICES



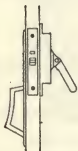
E-10—EXIT ONLY
No outside control.
①



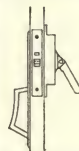
E-1030—EXIT ONLY
No outside controls on either leaf. Door closers not required. Use overlapping astragal No. 4411.



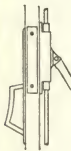
E-3030—EXIT ONLY
No outside control on either leaf. Door closers not required. Split astragal No. 4421 required on exterior doors.



E-11—ENTRANCE AND EXIT
Outside operation by pull handle when latch bolt is retracted. Door closer is recommended.
①



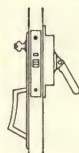
E-1130—ENTRANCE AND EXIT, ONE LEAF ACTIVE
Outside operation of active leaf by pull handle when latch bolt is retracted. No outside control on inactive leaf. Door closer recommended on active leaf, optional on inactive leaf.



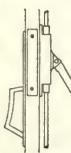
E-3130—EXIT ONLY
Outside operation of active leaf by pull handle when vertical rods are retracted. No outside control on inactive leaf. Split astragal No. 4421 is recommended.



E-12—ENTRANCE AND EXIT
Outside operation by pull handle when latch bolt is retracted. By key when latch bolt is not retracted. Door closer is recommended.
①



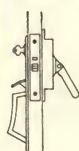
E-1230—ENTRANCE AND EXIT, ONE LEAF ACTIVE
Outside operation of active leaf by pull handle when latch bolt is retracted. By key when latch bolt is not retracted. No outside control on inactive leaf. Door closer recommended on active leaf.



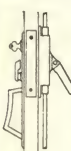
E-3131—EXIT ONLY
Outside operation of both leaves by pull handle when vertical rods are retracted. Split astragal No. 4421 required on exterior doors. Door closers are recommended on both leaves.



E-23—ENTRANCE AND EXIT
Outside operation by thumb piece, when not locked by key. Key locks thumb piece. Door closer is optional.
①



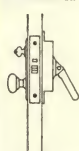
E-2330—ENTRANCE AND EXIT, ONE LEAF ACTIVE
Outside operation of active leaf by thumb piece when not locked by key. Key locks thumb piece. Closer optional. No outside control on inactive leaf with vertical rod device.



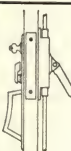
E-3230—ENTRANCE AND EXIT, ONE LEAF ACTIVE
Outside operation of active leaf by pull handle when vertical rods are retracted. By key and lever handle on active leaf when latch bolt is not retracted. No outside control on inactive leaf. Door closer is recommended on both leaves.



E-24—ENTRANCE AND EXIT
Outside operation by knob when not locked by key. Key locks knob. Door closer is optional.
①



E-2430—ENTRANCE AND EXIT, ONE LEAF ACTIVE
Outside operation of active leaf by knob when not locked by key. Key locks knob. Closer optional. No outside control on inactive leaf with vertical rod device.



E-3231—ENTRANCE AND EXIT, ONE LEAF ACTIVE
Outside operation of both leaves by pull handle when vertical rods are retracted. By key and lever handle on active leaf when not retracted. Door closers recommended on both leaves.



KNOB AND CYLINDER



NO OUTSIDE CONTROLS



PULL HANDLE



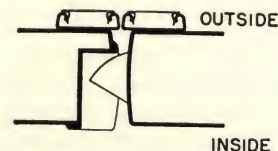
PULL AND CYLINDER



PULL, THUMB-PIECE AND CYLINDER



PULL, CYLINDER AND LEVER HANDLE



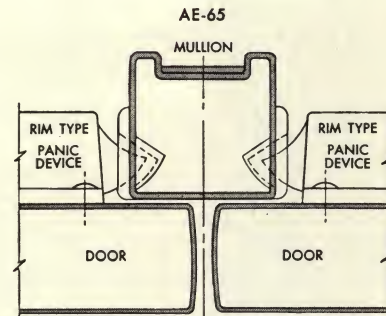
OPEN BACK STRIKE No. A75 is used on double doors with combination anti-panic devices and split astragal No. 4421 to make both leaves active to exit traffic.

Note: Mortise panic devices can be used on the active leaf of Underwriters' double doors. Use surface or flush bolts on inactive leaf.

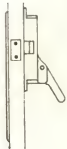
OVERLAPPING ASTRAGAL No. 4411 is used with anti-panic devices where the inactive leaf is used only in emergency. Cannot be used with double vertical rod devices or No. A75 open back strike.

Rim type panic devices are stocked in Chicago. Panel doors and standard 5½" depth frames all prepared for rim devices furnished from company warehouses. Devices for doors larger than 3870 leaf size on special order. Stocked in US10—Dull Bronze and US28—Alumilited Aluminum.

Rim panic devices are Heavy Duty (Russwin No. 466-467 Line), and are not to be confused with Medium Duty or Light Duty grades.

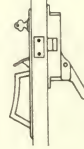


RIM TYPE PANIC DEVICES



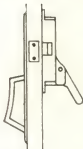
E-50—EXIT ONLY

No outside controls. Closer optional.



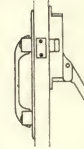
E-53—ENTRANCE AND EXIT

Outside operation by thumb piece and pull handle when not locked by key. Key locks the thumb piece. Door closer is recommended.



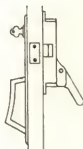
E-51—ENTRANCE AND EXIT

Outside operation by pull handle only when latch is held retracted. Door closer is recommended.



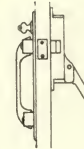
E-54—ENTRANCE AND EXIT

Outside operation by pull bars when latch bolt is held retracted. Door closer is recommended.



E-52—ENTRANCE AND EXIT

Outside operation by pull handle only when latch is held retracted. By key when latch bolt is not retracted. Door closer recommended.



E-55—ENTRANCE AND EXIT

Outside operation by pull bars when latch is held retracted. By key when latch bolt is not retracted. Door closer is recommended.



NO OUTSIDE CONTROL



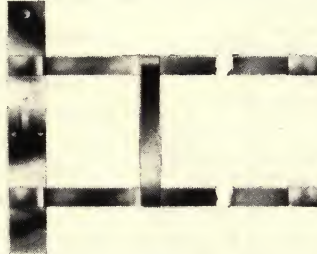
PULL ONLY



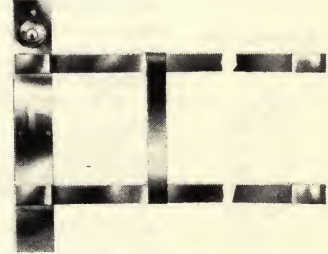
PULL WITH CYLINDER



PULL WITH THUMB PIECE AND CYLINDER



PULL BARS ONLY



PULL BARS WITH CYLINDER

STEEL REMOVABLE MULLION

No. AE-65 size 2¾" x 2¾" can be furnished for double swing doors using rim panic devices on both leaves. The Ceco No. AE-65 Mullion is easily removed when a full double door opening is desired. Provides protection for the latch bolt so that no instrument can be inserted between the latch and strike plate. Each door opens independently of one another and affords two way traffic. Full weather protection is provided at meeting of doors. No astragal is required.

INSIDE OPERATIONS ON ALL ANTI-PANIC DEVICES

The purpose of anti-panic devices is to provide rapid exit, at all times, by pushing the inside cross-bar. They cannot be locked on the inside. They are always used on swing out doors. Latch bolts can be held retracted by dogging down cross-bar with the dogging key making the door push and pull operation, requiring door closers.

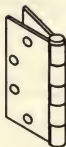


Hinges — Closers



FULL MORTISE HINGES
FOR PRESSED METAL FRAMES

2110



PLAIN BEARING HINGES

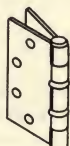
Normally used on low frequency doors.

Do not use on doors with closers, use ball bearing hinges.

- ① *No. 2110-USP (Steel—Paint)
- ① *No. 2110-US10 (Steel — Bronze Plate)
- ① *No. 2110-LS (Steel—Aluminum)
- ① No. 2110-US26D (Steel—Chrome Plate)

TWO BALL BEARING HINGES are recommended on doors of average to high frequency.

2112-2212



- ① *No. 2112-USP (Steel—Paint)
- ① *No. 2112-US10 (Steel — Bronze Plate)
- ① *No. 2112-LS (Steel—Aluminum)
- ① No. 2112-US26D (Steel—Chrome Plate)
- *No. 2212-US10 (Bronze)
- No. 2212-US26D (Bronze—Chrome Plate)

FOUR BALL BEARING HINGES are recommended for use on high frequency doors, entrances, locker rooms, etc.

2114-2214



- ① *No. 2114-USP (Steel—Paint)
- ① *No. 2114-US10 (Steel — Bronze Plate)
- ① No. 2114-LS (Steel—Aluminum)
- ① No. 2114-US26D (Steel—Chrome Plate)
- *No. 2214-US10 (Bronze)
- No. 2214-US26D (Bronze—Chrome Plate)
- ① No. 2624-USP (Steel—Paint)
Extra heavy for (A) Label Doors over 3'-0" wide.

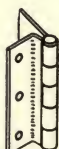
The above hinges are interchangeable and reversible and are hinge manufacturers standard of quality 4½" x 4½" full mortise regular weight templated, packed with screws and hinge closing plate. Three hinges are used on doors up to 7'-6" high, four hinges on doors 7'-6" to 10'-0" high.

Non-Removable Pin Hinges can be furnished on order. Suffix hinge number with letters NRP (2310NRP-USP). NRP hinges have a set screw in barrel inaccessible when door is closed.



HALF MORTISE HINGES
FOR STRUCTURAL STEEL FRAMES

2310



PLAIN BEARING HINGES

Normally used on low frequency doors. Do not use with door closers.

- ① *No. 2310-USP (Steel—Paint)
- ① *No. 2310-US10 (Steel — Bronze Plate)
- ① *No. 2310-LS (Steel—Aluminum)
- ① No. 2310-US26D (Steel—Chrome Plate)

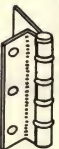
2312



TWO BALL BEARING HINGES are recommended for use on average to high frequency doors.

- ① *No. 2312-USP (Steel—Paint)
- ① *No. 2312-US10 (Steel — Bronze Plate)
- ① *No. 2312-LS (Steel—Aluminum)
- ① No. 2312-US26D (Steel—Chrome Plate)

2314



FOUR BALL BEARING HINGES are recommended for high frequency doors.

- ① *No. 2314-USP (Steel—Paint)
- ① *No. 2314-US10 (Steel — Bronze Plate)
- ① No. 2314-LS (Steel—Aluminum)
- ① No. 2314-US26D (Steel—Chrome Plate)
- ① No. 2724-USP (Steel—Paint)
Extra heavy for (A) Label Doors over 3'-0" wide.

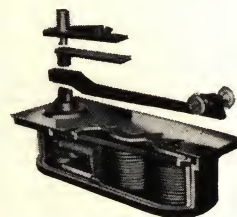
*Full mortise and half mortise hinges stocked in company and/or Chicago warehouses.

Half Mortise Hinges are furnished for doors with structural frames. Hinge manufacturers standard of quality 4½" x 4½" regular weight and are packed with screws and hinge closing plates.

Half Mortise Hinges are interchangeable and fit the standard hinge mortise in doors, and are reversible.

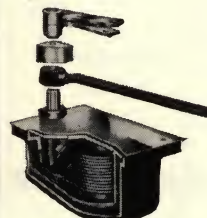
DOUBLE ACTING

No. 22 and
No. 23



SINGLE ACTING

No. 18 and
No. 19



FLOOR CHECKING HINGES
SINGLE AND DOUBLE ACTING

No. 22 (Gov. No. 3510-I)

DOUBLE ACTING FLOOR CHECKING HINGE for use on interior doors size 3470 or smaller, on exterior doors 2870 or smaller.

No. 23 (Gov. No. 3510-II)

DOUBLE ACTING FLOOR CHECKING HINGE for use on interior doors size 4070 or smaller, on exterior doors 3470 or smaller.

No. 18 (Gov. No. 3520A-II)

SINGLE ACTING FLOOR CHECKING HINGE for use on interior doors size 3470 or smaller. On exterior doors size 2870 or smaller.

No. 19 (Gov. No. 3520A-III)

SINGLE ACTING FLOOR CHECKING HINGE for use on interior doors size 4070 or smaller. On exterior doors 3470 or smaller.

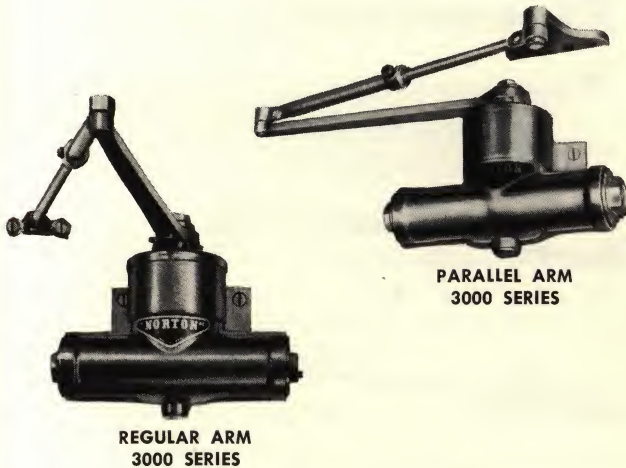
Single acting floor checking hinges are available with hold-open feature. Suffix "HA" after hinge number.

EXAMPLE: No. 19 HA-US10

FLOOR CHECKING HINGES are hydraulic piston torsion spring type, furnished with top pivot and cement case. Can be used with or without thresholds. Furnished in Dull Bronze (US10), or Dull Chrome (US26D).

Furnished on special order only. Doors and frames requiring floor checking hinges manufactured on special order.

Manufactured by Shelby Hinge Company.



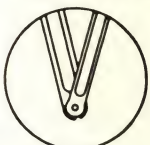
**3000 SERIES
SURFACE DOOR CLOSERS**

Door closers are liquid checking, rack and pinion type, with flat motor clock spring. Reversible, standard finish Bronze. Corner brackets used to mount closures on inside of swing out exterior doors. Doors subject to strong drafts should have next larger size closer than shown in table below. Available in aluminum finish.

Parallel arm closers are designated by suffixing (PA) after the closer number. Example: 3031 PA. Corner brackets are never used with this type closer. Parallel arm closers are so designed as to replace closer with corner bracket when required. Not stocked.

CECO NUMBER	TYPE OF ARM	DOOR LEAF SIZES		GOV. NO.	MFG'S. NO.
		INTERIOR	EXTERIOR		
*3031 ①	Regular Arm	2668 to 2868	2668	III	3 or C
*3032	Hold Open Arm	3068 to 3468	2868		
*3033 ①	Fusible Link Arm	2670 to 3070	2670		
*3034 ①	Corner Bracket for Above Closers				
*3041 ①	Regular Arm	3470	3070	IV	4 or D
*3042	Hold Open Arm	3870	3470		
*3043 ①	Fusible Link Arm	4070	3870		
*3044 ①	Corner Bracket for Above Closers				
*3051 ①	Regular Arm	50100	4070	V	5 or E
*3052	Hold Open Arm		4080		
3053 ①	Fusible Link Arm				
*3054 ①	Corner Bracket for Above Closers				
3061 ①	Regular Arm		50100	VI	6 or F
3062	Hold Open Arm				
3063 ①	Fusible Link Arm				
3064 ①	Corner Bracket for Above Closers				

FOR MEDALLION—FLUSH PANEL OR PANEL DOORS



REGULAR ARM
Ball and Socket construction at Knuckle. No hold open device.

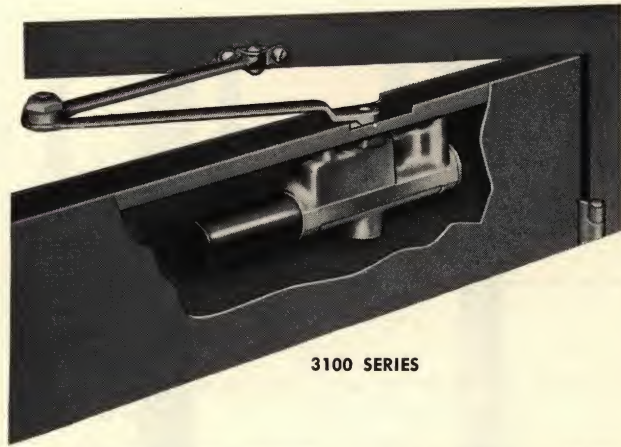


HOLD OPEN ARM
Friction type. Adjustable to hold door open at any angle from 0° to 100°.



FUSIBLE LINK ARM
Hold open arm with fusible link release at 160° F., allowing door to close.

*Closers stocked in company warehouses in bronze finish. Aluminum finish available on special order.



INADOR DOOR CLOSERS

FOR MEDALLION DOORS ONLY

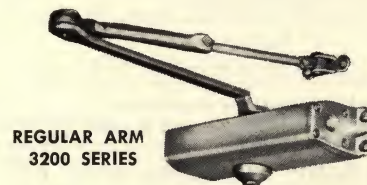
The Ceco Inador closer is rack and pinion construction. Non-gumming, non-freezing hydraulic fluid permanently lubricates every moving part. Double adjusting levers at top of closer controls the closer speed and the latching action. The case is an extruded aluminum shell.

CECO INADOR CLOSER SELECTION TABLE

CECO NUMBER	CLOSER DESCRIPTION	INT. LOW FREQUENCY	INT. HIGH FREQUENCY	EXT. LOW FREQUENCY
*3121 ① *3122	Regular Arm Hold-Open Arm (90°)	2668 to 3068 2670 to 3070	2668 to 2670 2868 to 2870	
*3131 ① *3132 *3133 ①	Regular Arm Hold-Open Arm (90°) Fusible-Link Arm	3468 to 3470 3870	3068 to 3070 3468 to 3470	
*3141 ① *3142 *3143 ①	Regular Arm Hold-Open Arm (90°) Fusible-Link Arm		3870	2668 to 2670 2868 to 2870 3068 to 3070

NOTE: Inador closers can be used on low frequency exterior doors only when opening is protected from wind. Interior doors subject to draft conditions use the next larger size closer.

**3200 SERIES
SURFACE DOOR CLOSERS**



3200 series door closers are rack and pinion construction, as manufactured by the Norton Door Closer Company.

Swing out exterior doors use parallel arm closers. Suffix (PA) after closer number.

CECO NUMBER	TYPE OF ARM	DOOR LEAF SIZES		GOV. NO.	MFG'S. NO.
		INTERIOR	EXTERIOR		
*3231 ① *3232 *3233 ①	Regular Arm Hold Open Arm Fusible Link Arm	2668 to 2868 3068 to 3468 2670 to 3070 2870	2668 2868 2670 2870	III	3 or C
*3241 ① *3242 *3243 ①	Regular Arm Hold Open Arm Fusible Link Arm	3470 3870 4070 4080	3070 3470 3870		
*3251 ① *3252 *3253 ①	Regular Arm Hold Open Arm Fusible Link Arm	50100	4070 4080		



Surface Bolts – Flush Bolts – Door Stops and Holders



TOP BOLT



BOTTOM BOLT

SURFACE BOLTS

No. 4031 - US2C ① *	8" Bottom Bolt Steel Cadmium Plated. For all doors.
No. 4031 - US10 ① *	8" Bottom Bolt Steel Bronze Plated. For all doors.
No. 4032 - US2C ① *	8" Top Bolt Steel Cadmium Plated. For doors up to 7'-0" high.
No. 4032 - US10 ① *	8" Top Bolt Steel Bronze Plated. For doors up to 7'-0" high.
No. 4033 - US2C ① *	20" Top Bolt Steel Cadmium Plated. For 8'-0" high doors.
No. 4034 - US2C ① *	44" Top Bolt Steel Cadmium Plated. For 10'-0" high doors.
No. 4041 - US10 ① *	8" Bottom Bolt Bronze. For all doors.
No. 4042 - US10 ① *	8" Top Bolt Bronze. For doors up to 7'-0" high.
No. 4051 - US28 ① *	8" Bottom Bolt Aluminum. For all doors.
No. 4052 - US28 ① *	8" Top Bolt Aluminum. For doors up to 7'-0" high.

* Surface bolts stocked in company warehouses.
US26D (dull chrome) finish is fabricated to order.

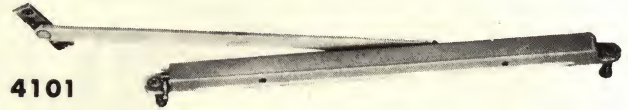
FLUSH EXTENSION BOLT



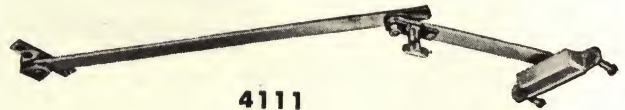
No. 194 ① Flush extension bolts are used on the top and bottom of inactive leaf of double swing doors. Normally used in pairs for maximum security. Singular use not recommended. Lever type operation permits positive action and affords a concealed appearance when doors are in the closed position. Ordering example: 2-194-US10.

FLUSH BOLTS FURNISHED ON SPECIAL ORDER.

Available in US10, US28 and US26D Finishes. Doors requiring flush extension bolts are fabricated to order. Standard 5½" depth frames from company warehouses.



4101



4111



4121

OVERHEAD DOOR HOLDERS

No. 4101 Slide action overhead door holder. Spring shock absorber stops door at maximum position of 90°. Quarter turn of control handle disengages hold-open action. Not reversible.

No. 4111 Arm action overhead door holder. Spring shock absorber stops door at maximum opening position of 90°. Quarter turn of control handle disengages hold-open action. Not reversible.

No. 4121 Slide action economy overhead door holder spring shock absorber. Stops door at maximum position of 90°. Hold-open action can be readily disengaged.

OVERHEAD DOOR HOLDERS NOT STOCKED.

DOOR STOPS AND BUMPERS



*No. 4061 FLOOR TYPE HOLDER AND BUMPER Door Bumper with Manual hold-open feature. Cannot be held open unintentionally. Attached to door in field with thru-bolts. Attached to floor with expansion shield. Finishes Dull Bronze (US10) Aluminum (US28).

*No. 4062 PLUNGER TYPE DOOR HOLDER Plunger Type Door Holder holds door open at any angle. Throw of bolt variable to 1¼". Rubber shore grips door firmly. 6" high. Finishes Dull Bronze (US10) Aluminum (US28).

① *No. 4063 WALL BUMPER Wall Type Door Bumper. Fastened to wall with wall expansion shields. 3¾" long 2" Base dia. Finishes Dull Bronze (US10) Aluminum (US28).

① *No. 4064 FLOOR BUMPER Floor Type Door Bumper fastened to floor with expansion shield. 1" high 2" Base dia. Finishes Dull Bronze (US10) Aluminum (US28).

*No. 4065 WALL BUMPER AND HOLDER Wall Type Bumper that incorporates a door holder. 3½" long 2¾" Base dia. Fastens to wall with expansion shield.

*No. 4066 FLOOR TYPE BUMPER AND HOLDER Automatic Door Holder and Bumper, pull-release. Attached to door in field with thru-bolts. Strike attached to floor with expansion shields. Finishes Dull Bronze (US10) Aluminum (US28).

*All door stops and bumpers in US10 or US28 finishes are stocked in company and/or Chicago warehouses. US26D (Dull Chrome) finish door stops and bumpers are fabricated to order.

Miscellaneous Hardware and Accessories



KICKPLATES

① *No. 4301 Bronze Kickplate 6" high, .050" thick, width to suit door. Finish Bronze (US10).

① *No. 4311 Aluminum Kickplate 6" high, .050" thick, width to suit door. Finish Alumilited Aluminum (US28).

① *No. 4321 Plastic Kickplate 6" high and 1/8" thick, in width to suit door. Furnished in color Black only.

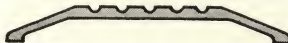
*Kickplates stocked in company and/or Chicago warehouses in US10 or US28 finishes. Plastic Kickplates stocked in black only. Kickplates are shipped with hardware and attached to doors in the field, or attached to doors in factory when specified.

ROLLER LATCH—HOSPITAL PULL



No. 5601 **ROLLER LATCH**. Can be used with CECO push-pull handle or bar sets. This latch silently engages the strike and holds the door closed. Available in US10 or US26D finishes.

No. 4075 **HOSPITAL ARM PULL** is normally used with the No. 5601 roller latch. Allows personnel to open door while carrying trays, etc. Available in US10 or US26D finish.



No. 4201-4211 — THRESHOLDS

① *No. 4201 Bronze Threshold

① *No. 4211 Aluminum Threshold

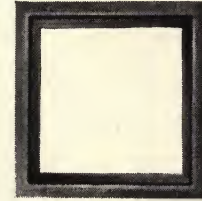
Thresholds are 4" wide and 1/2" high corrugated. Furnished drilled with rawl plugs and attachment screws.

Furnished slightly larger than door opening width for accurate cutting in field to fit.

*Thresholds stocked in company and/or Chicago warehouses in US10 or US28 finishes.



* 4801



* 4811

VISION LIGHTS

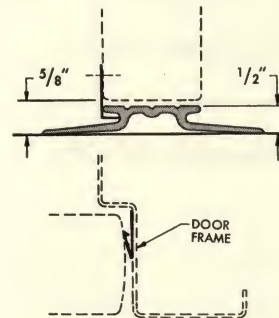
① No. 4801 VISION LIGHT 10" x 10"
For Panel Type Doors

① No. 4811 VISION LIGHT 10" x 10"
For Flush Type Doors

Vision lights are furnished unglazed with 3/8" glass rebate for 1/4" plate or wire glass. Can be used in Underwriters' "B" Labelled Doors.

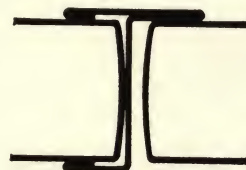
* Stocked in company or Chicago warehouses.

WEATHERSTRIP AND THRESHOLD KIT

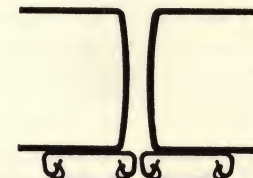


① *No. 4221 Thresholds are 4" wide and 1/2" high. Available in bronze (US10) or aluminum (US28) finish. Hook strip and spring type weather-strip included with necessary attachment screws.

Doors 3070 or smaller use #4221-3070. Doors 3870 or smaller use #4221-3870. Double doors 6070 or smaller use #4221-6070. Double doors 7470 or smaller use #4221-7470. Larger sizes on special order.



* 4411



* 4421

① No. 4411 **OVERLAPPING ASTRAGALS** are used on double doors with one leaf inactive. Always attached to inactive leaf. Astragals are mortised for cylindrical or mortised lock strikes as required. Do not use on doors with both leaves active. Rolled No. 16 gauge steel.

* Stocked in warehouses.

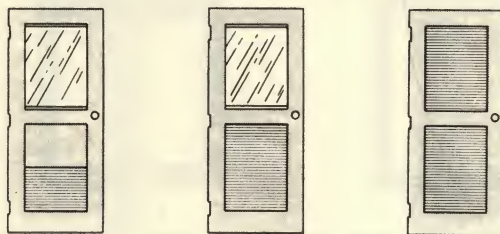
No. 4421 **SPLIT ASTRAGALS** are used on double doors in exterior walls that have both leaves active. They are horizontally adjustable to reduce operating clearance to a minimum. Attachment screws are concealed by continuous cover plate. Always attached to outside of door. Astragal No. 18 gauge, cover, No. 22 gauge rolled steel.

* Stocked in warehouses.

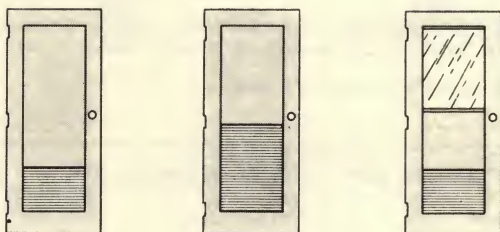


Louvers: Air Conditioning and Stamped Type

FLUSH PANEL AND PANEL DOORS



PANEL DOORS



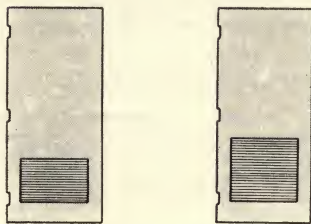
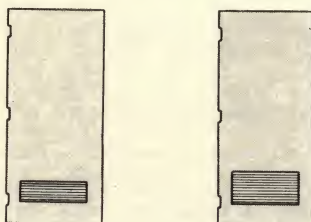
FLUSH PANEL DOORS

HALF BOTTOM LOUVER	
NUMBER	FREE AIR PASSAGE
4621-26	232 Square Inches
4621-28	256 Square Inches
4621-30	305 Square Inches
4621-34	354 Square Inches
4621-38	403 Square Inches
FULL BOTTOM LOUVER	
NUMBER	FREE AIR PASSAGE
4622-26	464 Square Inches
4622-28	512 Square Inches
4622-30	610 Square Inches
4622-34	708 Square Inches
4622-38	806 Square Inches
FULL TOP LOUVER	
NUMBER	FREE AIR PASSAGE
4623-26	526 Square Inches
4623-28	581 Square Inches
4623-30	692 Square Inches
4623-34	807 Square Inches
4623-38	914 Square Inches

Specifications:

The Ceco air conditioning type louver is sight-tight, steel $\frac{3}{8}$ " thick with $\frac{1}{8}$ " fin spacing. Vertical stiffener ribs are on 1" centers. This grid type construction provides 81.5% of free air area. Louvers are furnished completely installed in Ceco doors.

MEDALLION DOORS



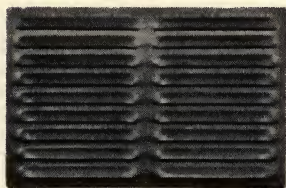
8" IN HEIGHT		12" IN HEIGHT	
NUMBER	FREE AIR	NUMBER	FREE AIR
4641-20	75 Sq. Inches	4642-20	117 Sq. Inches
4641-26	113 Sq. Inches	4642-26	176 Sq. Inches
4641-28	126 Sq. Inches	4642-28	202 Sq. Inches
4641-30	151 Sq. Inches	4642-30	234 Sq. Inches
4641-34	176 Sq. Inches	4642-34	273 Sq. Inches
4641-38	202 Sq. Inches	4642-38	313 Sq. Inches
16" IN HEIGHT		24" IN HEIGHT	
NUMBER	FREE AIR	NUMBER	FREE AIR
4643-20	159 Sq. Inches	4644-20	232 Sq. Inches
4643-26	238 Sq. Inches	4644-26	348 Sq. Inches
4643-28	264 Sq. Inches	4644-28	387 Sq. Inches
4643-30	317 Sq. Inches	4644-30	464 Sq. Inches
4643-34	370 Sq. Inches	4644-34	542 Sq. Inches
4643-38	423 Sq. Inches	4644-38	619 Sq. Inches

Specifications:

The Ceco air conditioning type louver is sight-tight, steel $\frac{3}{8}$ " thick with $\frac{1}{8}$ " fin spacing. Vertical stiffener ribs are on 1" centers. This grid type construction provides 81.5% of free air area. Louvers are furnished completely installed in Ceco doors.

STAMPED AND AIR CONDITION TYPE

No. 4601 Fixed Slot Louvers are No. 16 gauge steel. Use with Medallion, Flush Panel or Panel Doors.



No. 4601

CECO NUMBER	DESCRIPTION
4601-12	Stamped Louver 12" x 12" for doors 2' 0" and over
4601-19	Stamped Louver 19" x 12" for doors 2' 8" and over
4601-24	Stamped Louver 19" x 24" for doors 2' 8" and over



No. 4631

No. 4631 Air Condition Louvers are sight-tight, steel $\frac{3}{8}$ " thick with $\frac{1}{8}$ " fin spacing. Vertical stiffener ribs are on 1" centers. Grid type construction provides 81.5% of free air area. Use with Medallion or Flush Panel Doors.

CECO NUMBER	DESCRIPTION
4631-12	Air Condition Louver 12" x 8" for doors 2' 0" and over. (Applied)
4631-18	Air Condition Louver 18" x 12" for doors 2' 8" and over. (Applied)

Special Dutch Doors and Trucking Doors

dutch doors



Dutch doors are used in check rooms, tool rooms, locker rooms, parts rooms, ticket booths and other similar locations where a dispensing operation occurs.

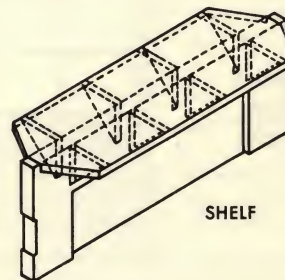
They are manufactured to order in Panel, Flush Panel and Medallion types. Sizes are from 2668 to 3468 and 2670 to 3470 in single swing doors and from 5068 to 6868 and 5070 to 6870 in double swing doors. Double swing doors are supplied with one leaf or both leaves in Dutch style.

The upper half of the Dutch leaves can be furnished in glass panel or in solid metal as required.

Dutch doors are furnished for cylindrical locks or latches and for mortised locks or latches, in any function desired. The lockset or latchset is always placed in the lower leaf.

The upper leaf has the surface bolt on the inside to lock the upper leaf to the lower leaf. When the surface bolt is engaged, the door operates as a single swing one-piece door. The hardware for Dutch doors is listed separately.

Shelves: Dutch doors are furnished with or without shelves as desired. Shelves are twelve inches wide and made of fourteen gauge steel, with four brackets on each side to withstand rough usage.



SHELF



MORTISE LOCK

Mortise locks or latches as shown on pages 18-D and 19-D, can be furnished on Dutch doors. Push-pull bar sets and anti-panic devices are not recommended.



CYLINDRICAL LOCK

Heavy duty 400 Series and standard duty 300 Series cylindrical locksets can be furnished. See pages 14-D, 15-D, 16-D and 17-D for selection.



SURFACE BOLT

Surface bolts used to lock the upper door leaf can be furnished in steel, bronze or aluminum in eight inch lengths. See page 26-D for selections.

trucking doors



Trucking doors are fabricated to order. The lower portion of the door has twelve gauge steel plates on both sides. The hinge side of the door is reinforced with a twelve gauge steel tube to properly support the hinges. Rubber astragals and retaining angles are used on exterior doors for weathering.

Spring bumpers are located at heights to fit hand trucks and are through-bolted to the door. Spring bumpers are nineteen inches long and eight inches in height and are made of twelve gauge spring steel. The width of the doorway should be twice the width of the hand trucks used. Doors should always be glazed in the upper portion, so the traffic can be seen approaching from either direction.

Hardware: Double acting trucking door hinges, number 2521, are extra heavy wrought steel, sixteen inches in height. Each hinge has four individual springs which gives this hinge about twice the closing strength of other similar hinges. The Ceco number 2521 hinge will make only five oscillating movements before stopping. **NO HANGING STRIPS ARE REQUIRED WITH CECO TRUCKING DOOR HINGES.** Hinges are through-bolted to the door.

Trucking doors cannot be used for entrance from the outside. They are furnished with or without slide bolts for locking from the inside only. See page 26-D for slide bolts available.

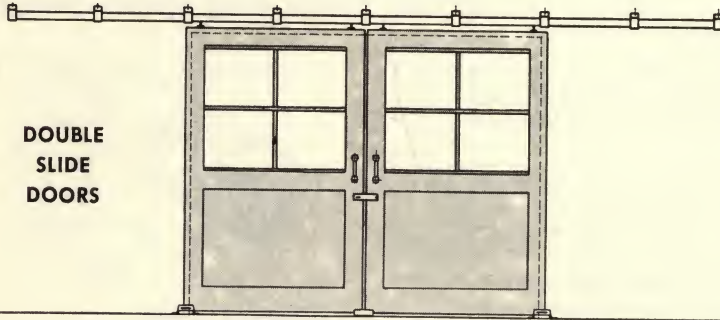
Trucking doors are not furnished larger than 4'-0" x 8'-0" leaf size. Doors up to 6070 have two hinges per leaf. Doors over 6070 to 8080 have three hinges per leaf. Pressed steel frames **CANNOT** be used with trucking doors. Complete frame preparation details are furnished on request for preparing structural frames.

**DO NOT USE MOTORIZED EQUIPMENT
TO OPEN TRUCKING DOORS**

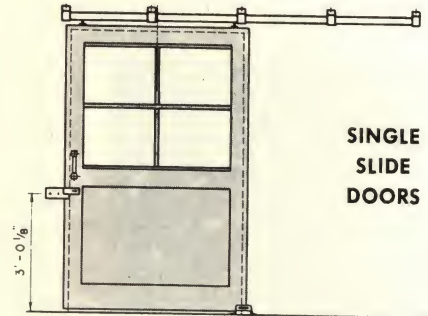


Hollow Metal Panel Slide Doors

**DOUBLE
SLIDE
DOORS**



**SINGLE
SLIDE
DOORS**



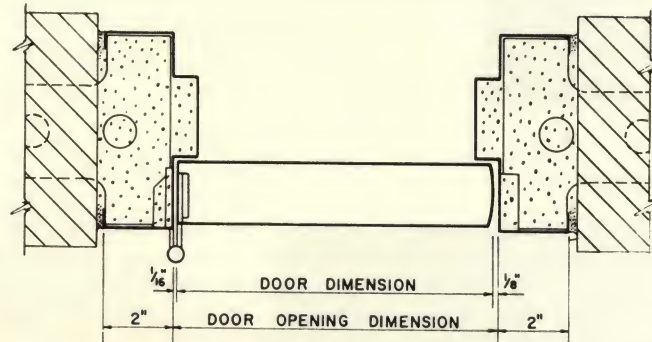
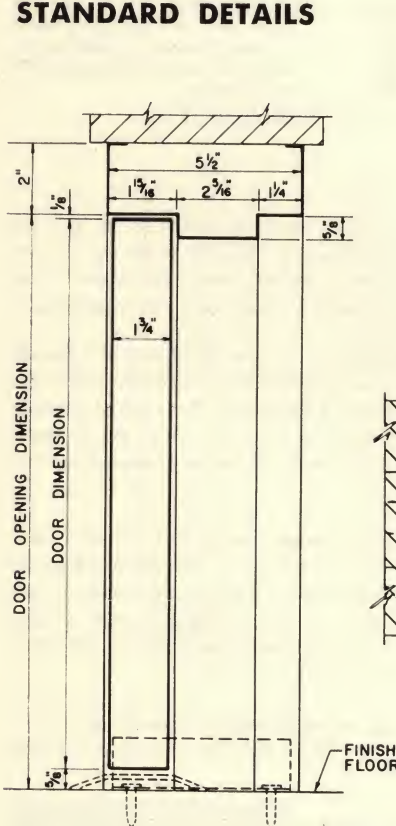
DOUBLE SLIDE DOORS				
DOOR NUMBER	DOOR SIZE		DOOR OPENING	
	WIDTH	HEIGHT	WIDTH	HEIGHT
PS-6070	5'-11 $\frac{7}{8}$ "	6'-11 $\frac{1}{4}$ "	5'-8"	6'-10"
PS-8080	7'-11 $\frac{7}{8}$ "	7'-11 $\frac{1}{4}$ "	7'-8"	7'-10"
PS-100100	9'-11 $\frac{7}{8}$ "	9'-11 $\frac{1}{4}$ "	9'-8"	9'-10"

SINGLE SLIDE DOORS				
DOOR NUMBER	DOOR SIZE		DOOR OPENING	
	WIDTH	HEIGHT	WIDTH	HEIGHT
PS-3070	2'-11 $\frac{13}{16}$ "	6'-11 $\frac{1}{4}$ "	2'-8"	6'-10"
PS-4080	3'-11 $\frac{13}{16}$ "	7'-11 $\frac{1}{4}$ "	3'-8"	7'-10"
PS-50100	4'-11 $\frac{13}{16}$ "	9'-11 $\frac{1}{4}$ "	4'-8"	9'-10"

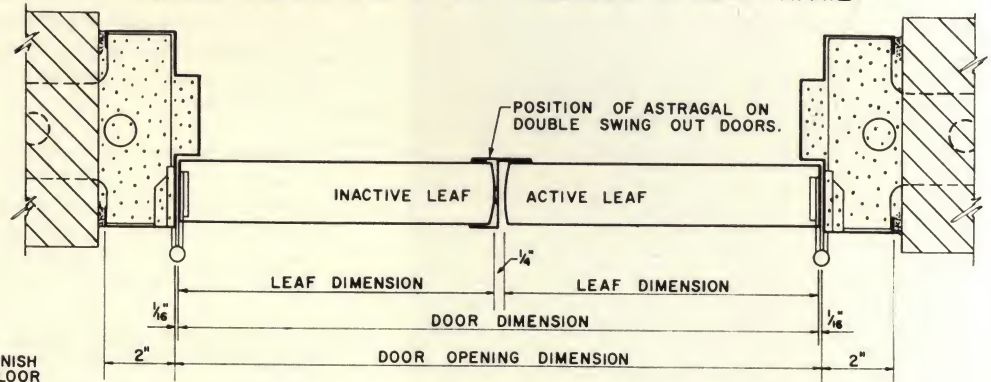
Slide doors are furnished complete with hardware including track, brackets, trolleys, guide rollers, pulls, hasp and staple. All attachment bolts are furnished except wall bolts. Frames and track flashing are not furnished. For full details, contact nearest Ceco office.

Doors are always handed when facing the exterior side of the door and the outside of the opening. Doors in interior walls are generally handed when facing the outside of the door and the corridor side or the larger room side.

STANDARD DETAILS

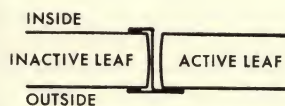


SINGLE SWING DOOR WITH PRESSED STEEL FRAME

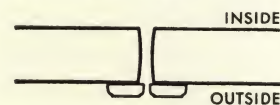


DOUBLE SWING DOORS WITH PRESSED STEEL FRAME

DOUBLE SWING OUT SHOWN



POSITION OF ASTRAGAL ON DOUBLE SWING IN DOORS. OVERLAPPING ASTRAGALS ALWAYS ON INACTIVE LEAF.



SPLIT ASTRAGAL REQUIRED ON EXTERIOR DOORS WHEN BOTH LEAVES ARE ACTIVE.

Specifications

1. General

All steel doors, door frames and hardware shall be as manufactured and furnished by Ceco Steel Products Corporation. Doors shall be Standardized Hollow Metal Medallion, Flush Panel, and Panel types.

Door hardware shall be furnished by the door manufacturer with doors mortised, machined and prepared for hardware attachment.

2. Door Construction

Medallion doors shall be $1\frac{3}{4}$ " thick, constructed of two No. 18 gauge furniture-quality cold-rolled, stretcher leveled pickled and oiled steel sheets. Vertical stiffeners shall be No. 19 gauge steel, on approximately 6" spacing, of hat shape, spot-welded to one face sheet and projection welded to the opposite sheet to provide rigid construction. Top and bottom channels shall be No. 14 gauge, spot-welded to the face sheets not less than 3" on center. Vertical edges of the door shall be reinforced with No. 14 gauge steel channels the entire height of the door.

The vertical joint between the two face sheets shall be tight against the vertical stiffener and this joint continuously welded closed and to the vertical stiffener. All doors will be furnished with top closing channels of No. 18 gauge steel. All doors shall be sound deadened with spun mineral wool.

Doors with openings for glass lights and/or louvers shall have the openings formed into the face sheets so that no frame is required. Beads shall be recessed behind the formed opening in the face sheet, beveled, and attached without the use of screws.

Flush Panel and Panel doors shall be $1\frac{3}{4}$ " thick, with stiles and rails formed from No. 16 gauge steel sheets into rectangular tubes with integral rebates; intermittently welded inside the rebates for structural rigidity. Stiles, top rails and center rails shall be $5\frac{1}{2}$ ". Bottom rails shall be 8" high. Lock stiles shall be formed for $\frac{1}{8}$ " jamb clearance.

Door corners shall be mitred, reinforced continuously face-welded and ground smooth; center rails shall be continuously face-welded to stiles and ground smooth.

Glazing rebates in moldings and muntins shall be $\frac{3}{8}$ " wide for installation of $\frac{1}{4}$ " thick glass.

Moldings, glazing beads, muntins and muntin glazing stops shall be No. 18 gauge steel.

Doors shall be mortised for hinges and locks, and template prepared for other surface hardware, attached with through bolts, or with screws into reinforced, tapped holes. No hardware shall be attached to doors and frames with self-tapping screws or sheet metal screws.

Double doors shall have astragals if required. One piece overlapping astragals shall be No. 16 gauge. Two piece astragals shall be No. 18 gauge with No. 22 gauge cover plates.

Hollow Metal Flush Doors

Hollow Metal Flush Panel Doors shall be manufactured as specified above and shall have $1\frac{5}{8}$ " panels of two No. 18 gauge steel sheets with No. 18 gauge steel "Z" shape stiffeners spaced approximately 12" apart, between the two panels. Sound deadening material $\frac{1}{16}$ " thick shall be placed on the inside of the panel sheets.

Hollow Metal Panel Doors

Hollow Metal Panel Doors shall be manufactured as specified above and shall have $\frac{3}{8}$ " thick panels of two No. 18 gauge steel sheets with insulating filler between. Lower panels shall be locked into rebates in stiles and rails when assembled. Upper panels shall have moldings to retain glass or $\frac{3}{8}$ " metal panels.

Underwriters' Labelled Doors and Frames

Doors designated as 3 hour or $1\frac{1}{2}$ hour labelled doors shall carry Underwriters' label on the door and on the frame. Double doors shall have overlapping rolled steel astragal.

Medallion, Flush Panel and Panel Doors and frames shall be constructed to meet Underwriters' Laboratories specific approval according to current procedure for 3 hour or $1\frac{1}{2}$ hour fire rating. Procedure No. R-3791 and R-3821 as listed by Underwriters.

3. Frames

Frames shall be formed from No. 16 gauge steel, with 2" face, $5\frac{1}{2}$ " depth and $\frac{5}{8}$ " integral stop.

Frame corners shall be mitred. Hinge jambs mortised for hinges, lock jambs mortised for lock strike with mortises protected by metal plaster guards. Frames are shipped knocked-down.

Jambs shall be flush with finished floor, with floor anchors attached to jambs with bolts, to set on the finished floor, or 1" below the finished floor.

Patented rubber door silencers, air cushion type shall be furnished for strike jambs of single doors and for frame heads of double doors.

Frames shall be prepared for attachment of all required hardware. All hardware screw holes shall be reinforced. No hardware shall be attached to frames with self-tapping or sheet metal screws.

4. Hardware

Cylindrical Type Locksets and Latchsets shall be Heavy Duty or Standard Duty as designated by the lock numbers. The Heavy Duty Lockset has a steel, zinc plated cylindrical case. Dichromate Dip $2\frac{1}{16}$ " in diameter. The front shall be wrought bronze or aluminum, $2\frac{1}{4}$ " x $1\frac{1}{8}$ " in size with a flat front. Latch bolt shall be solid brass with a $\frac{5}{8}$ " throw.

The Standard Duty Lockset has a steel, zinc plated cylindrical case. Dichromate Dip $2\frac{1}{16}$ " in diameter. The front shall be wrought bronze or aluminum, $2\frac{1}{4}$ " x $1\frac{1}{8}$ " in size with a flat front. Latch bolt shall be solid brass with a $\frac{3}{8}$ " throw.

Mortised Type Locksets and Latchsets shall be manufacturers' Heavy Duty Commercial Grade. Locks and mortise latches shall have armored fronts. Cases and caps shall be cast iron. Escutcheons, lock fronts, cylinder rings, strikes and knobs, shall be wrought bronze for locksets finished (US10) dull bronze (US26D) dull chrome.

Locksets with (US28) alumilited aluminum finish shall have wrought aluminum trim. Dead-bolts, latch bolts, thumb turns, pull bars and handles shall be cast bronze (US10) dull bronze finish or (US26D) dull chrome finish. Cast aluminum on (US28) alumilited aluminum finish.

Latch bolts are anti-friction type with a $\frac{5}{8}$ " throw. Dead-bolts are cast bronze with a $\frac{3}{8}$ " throw.

Hinges shall be hinge manufacturers' standard of quality $4\frac{1}{2}$ " x $4\frac{1}{2}$ " full mortise regular weight, templated button tips, reversible, in steel or bronze, furnished with attachment screws. Hinges for structural frames shall be as above except half mortise type.

Closers shall be rack and pinion, with flat motor-clock type spring. Closers shall have an aluminum shell and shall be reversible. Checking fluid non-evaporating non-gumming mineral oil of stabilized viscosity. Standard finish bronze.

Other hardware shall be as listed and described in current catalogs.

5. Painting and Glazing

All doors and frames shall be bonderized and painted one coat rust inhibitive zinc chromate primer, neutral grey color, oven dried. All finish painting, glass and glazing, putty, mastic, and other necessary compounds are not furnished by Ceco Steel Products Corporation.

6. Shop Drawings

All doors, frames and hardware shall be as shown on shop drawings prepared by Ceco Steel Products Corporation and approved by the architect before fabrication is started.



Contract

SALES OFFICES AND WAREHOUSES

Atlanta 9, Ga., 1401 Peachtree St., N.E.
 Birmingham 7, Ala., 3500 - 27th Ave., N.
 Charlotte 1, N. C., 314 W Trade St.
 Chicago 50, Ill., 1926 S. 52nd Ave.
 Cincinnati 6, Ohio, 700 E. McMillan St.
 Cleveland 9, Ohio, 1503 Brookpark Road
 Dallas 35, Texas, 6901 Forest Park Rd.
 Denver 16, Colo., 6121 Clermont St.
 Des Moines 9, Iowa, 404 Hubbell Bldg.
 Detroit 27, Mich., 15216 Castleton Ave.
 Hartford, Conn., 621 Farmington Ave.
 Hillside 5, N. J., 625 Glenwood Ave.
 Houston 10, Texas, 1902 Weber St.
 Indianapolis 2, Ind., 1538 N. Meridian St.
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 Los Angeles 23, Calif., 1450 Mirasol St.
 Miami, Fla., 2264 W. Flagler
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 Minneapolis 13, Minn., 2900 E. Hennepin Ave.
 New Orleans 13, La., 1539 Jackson Ave.
 Oklahoma City 5, Okla., 421 N.E. 29th
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 Philadelphia 3, Pa., 1700 Walnut St.
 Pittsburgh 36, Pa., 1501 Lebanon Church Rd.
 St. Louis 17, Mo., 8310 Eager Rd.
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Ask for complete details

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Carol J. Dyson, AIA